

Braking Resistors for Variable Frequency Drives

AC variable frequency drives are commonly used with a general purpose AC induction motor to form a reliable variable speed drive system. For applications that require faster deceleration rates, or where motor speeds are exceeding the synchronous speed set by the output frequency of the drive (an overhauling load condition), a braking resistor is required. Braking resistors increase the braking torque capability of a variable frequency drive, producing faster and more controlled braking. The resistor dissipates regenerated power to keep the bus voltage from exceeding the rated limit of the drive.

Powerohm's Type CR resistors are manufactured with quality components for superior performance and increased life expectancy. Case resistors feature a nickel-chromium wire helically wound, placed inside a ceramic fixture and inserted into a corrosion resistant aluminum case. Each coil end is terminated to high temperature wire leads and encapsulated with a ceramic potting material. The result is a resistor element electrically isolated, but thermally bound to the outer case to allow the element heat to transfer to the metallic case and efficiently cool. The units are supplied with 18" wire leads, and the case is machined to include two mounting holes for easy installation.



The type GCE enclosures are heavy gage screened enclosures featuring a solid bottom and a built-in wiring compartment separated from the resistor assembly. The resistors are factory wired to a terminal block mounted in this compartment using high temperature Teflon or silicone wire. The terminal compartment also houses a normally closed thermal switch used for detecting resistor temperature overloads. During installation, standard 90°C rated wire is routed into the compartment through the removable 1/2 inch conduit knockouts and connected to the factory wired terminal block.

The type ED enclosures are designed for applications requiring a large number of Type SXR, WR, VR and/or ER resistor coils. In addition to the large capacity, these units are supplied with terminal connections up to 400 amps continuous located on a terminal plate in the bottom of the enclosure. These factory wired connections allow standard 90°C rated wire to be used if routed along the enclosure bottom. If installing without the optional terminal connections, always use 200°C rated silicone or Teflon wire when attaching directly to resistors. A normally closed thermal switch is also provided, which is used to detect resistor temperature overloads.

Braking Choppers (Modules)

AC variable frequency drives are commonly used with general purpose AC induction motors to form reliable variable speed drive systems. Problems with these drive systems can occur when an application requires a deceleration rate faster than what can be managed by the drive alone, or when motor speeds exceed the synchronous speed set by the output frequency of the drive (which is called an overhauling load condition). Both of these conditions create regenerated power which flows from the motor back into the drive, causing its DC Bus to rise. To manage the regenerated power and avoid shutting the drive down due to an over-voltage trip, this power must be dissipated by an external braking resistor. Braking Modules are used in conjunction with an AC drive to monitor the DC bus of the drive and activate external braking resistor as needed.

Powerohm Type BM Braking Modules can be used in conjunction with ABB drives to monitor the DC bus of the drive and activate external braking resistor as needed not only to avoid over-voltage trips, but to greatly improve the performance of the drive system. The use of Braking Modules and resistors increase the braking torque capability of a variable frequency drive, allowing faster and more controlled deceleration times.

ACS150 and ACS355 Drives

Single Phase 200-240V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS150/355-01U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-CR-02	200	100	P14494-CR-02	200	100
04A7-2	1	P14494-CR-04	100	100	P14494-CR-04	100	100
06A7-2	1.5	P14494-CR-04	100	100	P14494-CR-11	100	150
07A5-2	2	P14494-CR-04	100	100	P14494-CR-16	100	200
09A8-2	3	P14494-CR-12	50	150	P14494-CR-24	50	300

Drive Part No. ACS150/355-01U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-CR-02	200	100	P14494-CR-02	200	100
04A7-2	1	P14494-CR-11	100	150	P14494-CR-16	100	200
06A7-2	1.5	P14494-CR-16	100	200	P14494-CR-22	100	300
07A5-2	2	P14494-CR-22	100	300	P14494-CR-30	100	400
09A8-2	3	P14494-CR-32	50	400			

Standard Enclosed Resistor Packages

Drive Part No. ACS150/355-01U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-19	75	300	P14494-19	75	300
04A7-2	1	P14494-24	45	300	P14494-24	45	300
06A7-2	1.5	P14494-24	45	300	P14494-24	45	300
07A5-2	2	P14494-31	35	300	P14494-31	35	300
09A8-2	3	P14494-31	35	300	P14494-31	35	300

Drive Part No. ACS150/355-01U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-19	75	300	P14494-19	75	300
04A7-2	1	P14494-24	45	300	P14494-24	45	300
06A7-2	1.5	P14494-24	45	300	P14494-24	45	300
07A5-2	2	P14494-31	35	300	P14494-32	35	820
09A8-2	3	P14494-32	35	820	P14494-32	35	820

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS150 and ACS355 Drives

Three Phase 200-240V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-CR-02	200	100	P14494-CR-02	200	100
03A5-2	0.75	P14494-CR-04	100	100	P14494-CR-04	100	100
04A7-2	1	P14494-CR-04	100	100	P14494-CR-04	100	100
06A7-2	1.5	P14494-CR-04	100	100	P14494-CR-11	100	150
07A5-2	2	P14494-CR-06	50	100	P14494-CR-18	50	200
09A8-2	3	P14494-CR-12	50	150	P14494-CR-24	50	300
17A6-2	5	P14494-CR-26	40	300	P14494-CR-34	40	400

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-CR-02	200.0	100	P14494-CR-02	200.0	100
03A5-2	0.75	P14494-CR-04	100.0	100	P14494-CR-11	100.0	150
04A7-2	1	P14494-CR-11	100.0	150	P14494-CR-16	100.0	200
06A7-2	1.5	P14494-CR-16	100.0	200	P14494-CR-22	100.0	300
07A5-2	2	P14494-CR-24	50.0	300	P14494-CR-32	50.0	400
09A8-2	3	P14494-CR-32	50.0	400			

Standard Enclosed Resistor Packages

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-19	75.0	300	P14494-19	75.0	300
03A5-2	0.75	P14494-19	75.0	300	P14494-19	75.0	300
04A7-2	1	P14494-24	45.0	300	P14494-24	45.0	300
06A7-2	1.5	P14494-24	45.0	300	P14494-24	45.0	300
07A5-2	2	P14494-31	35.0	300	P14494-31	35.0	300
09A8-2	3	P14494-31	35.0	300	P14494-31	35.0	300
17A6-2	5	P14494-31	35.0	300	P14494-32	35.0	820
24A4-2	7.5	P14494-39	21.0	400	P14494-40	21.0	750
31A0-2	10	P14494-46	15.0	750	P14494-47	15.0	1150
46A2-2	15	P14494-56	10.0	720	P14494-57	10.0	1250

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
02A4-2	0.5	P14494-19	75.0	300	P14494-19	75.0	300
03A5-2	0.75	P14494-19	75.0	300	P14494-19	75.0	300
04A7-2	1	P14494-24	45.0	300	P14494-24	45.0	300
06A7-2	1.5	P14494-24	45.0	300	P14494-24	45.0	300
07A5-2	2	P14494-31	35.0	300	P14494-32	35.0	820
09A8-2	3	P14494-32	35.0	820	P14494-32	35.0	820
17A6-2	5	P14494-32	35.0	820	P14494-33	35.0	1200
24A4-2	7.5	P14494-41	21.0	1050	P14494-42	21.0	1500
31A0-2	10	P14494-48	15.0	1550	P14494-49	15.0	2160
46A2-2	15	P14494-58	10.0	1800	P14494-59	10.0	3600

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS150 and ACS355 Drives

Three Phase 380-480V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
01A2-4	0.5	P14494-CR-01	500.0	100	P14494-CR-01	500.0	100
01A9-4	0.75	P14494-CR-01	500.0	100	P14494-CR-01	500.0	100
02A4-4	1	P14494-CR-02	200.0	100	P14494-CR-02	200.0	100
03A3-4	1.5	P14494-CR-02	200.0	100	P14494-CR-09	200.0	150
04A1-4	2	P14494-CR-03	150.0	100	P14494-CR-15	150.0	200
05A6-4	3	P14494-CR-11	100.0	150	P14494-CR-22	100.0	300
08A8-4	5	P14494-CR-22	100.0	300	P14494-CR-30	100.0	400
12A5-4	8	P14494-CR-32	50.0	400			

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
01A2-4	0.5	P14494-CR-01	500	100	P14494-CR-01	500	100
01A9-4	0.75	P14494-CR-01	500	100	P14494-CR-07	500	150
02A4-4	1	P14494-CR-09	200	150	P14494-CR-14	200	200
03A3-4	1.5	P14494-CR-14	200	200	P14494-CR-20	200	300
04A1-4	2	P14494-CR-21	150	300	P14494-CR-29	150	400
05A6-4	3	P14494-CR-30	100	400			

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS150 and ACS355 Drives

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
01A2-4	0.5	P14494-10	350.0	200	P14494-10	350.0	200
01A9-4	0.75	P14494-11	250.0	300	P14494-11	250.0	300
02A4-4	1	P14494-11	250.0	300	P14494-11	250.0	300
03A3-4	1.5	P14494-13	200.0	300	P14494-13	200.0	300
04A1-4	2	P14494-15	150.0	300	P14494-15	150.0	300
05A6-4	3	P14494-15	150.0	300	P14494-15	150.0	300
08A8-4	5	P14494-19	75.0	300	P14494-20	75.0	600
12A5-4	7.5	P14494-25	45.0	800	P14494-25	45.0	800
15A6-4	10	P14494-25	45.0	800	P14494-26	45.0	1260
23A1-4	15	P14494-32	35.0	820	P14494-33	35.0	1200
31A0-4	20	P14494-41	21.0	1050	P14494-43	21.0	2000
38A0-4	25	P14494-47	15.0	1150	P14494-49	15.0	2160
44A0-4	30	P14494-48	15.0	1550	P14494-50	15.0	2450

Drive Part No. ACS150/355-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
01A2-4	0.5	P14494-10	350.0	200	P14494-10	350.0	200
01A9-4	0.75	P14494-11	250.0	300	P14494-11	250.0	300
02A4-4	1	P14494-11	250.0	300	P14494-11	250.0	300
03A3-4	1.5	P14494-13	200.0	300	P14494-13	200.0	300
04A1-4	2	P14494-15	150.0	300	P14494-16	150.0	600
05A6-4	3	P14494-16	150.0	600	P14494-16	150.0	600
08A8-4	5	P14494-20	75.0	600	P14494-21	75.0	1000
12A5-4	7.5	P14494-26	45.0	1260	P14494-27	45.0	1920
15A6-4	10	P14494-26	45.0	1260	P14494-27	45.0	1920
23A1-4	15	P14494-38	35.0	1865	P14494-36	35.0	3600
31A0-4	20	P14494-44	21.0	2600	P14494-45	21.0	4400
38A0-4	25	P14494-53	15.0	3600	P14494-54	15.0	5000
44A0-4	30	P14494-53	15.0	3600	P14494-55	15.0	6000

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS250 Drives

Single-phase 100-120 V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS250-01U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
05A8-1	1.5	P14494-CR-06	50	100	P14494-CR-18	50	200

Drive Part No. ACS250-01U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
05A8-1	1.5	P14494-CR-24	50	300	P14494-CR-32	50	400

Standard Enclosed Resistor Packages

Drive Part No. ACS250-01U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
05A8-1	1.5	P14494-24	45	300	P14494-24	45	300

Drive Part No. ACS250-01U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
05A8-1	1.5	P14494-24	45	300	P14494-24	45	300

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS250 Drives

Single-phase 200-240 V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS250-01U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
10A5-2	3	P14494-CR-12	50	150	P14494-CR-24	50	300

Drive Part No. ACS250-01U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
10A5-2	3	P14494-CR-32	50	400			

Standard Enclosed Resistor Packages

Drive Part No. ACS250-01U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
10A5-2	3	P14494-31	35	300	P14494-31	35	300

Drive Part No. ACS250-01U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
10A5-2	3	P14494-32	35	820	P14494-32	35	820

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS250 UL Type 4X Drives Only

Three-phase 200-240 V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS250-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
07A0-2	2	P14494-CR-06	50	100	P14494-CR-18	50	200
10A5-2	3	P14494-CR-12	50	150	P14494-CR-24	50	300
18A0-2	5	P14494-CR-26	40	300	P14494-CR-34	40	400

Drive Part No. ACS250-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
07A0-2	2	P14494-CR-24	50	300	P14494-CR-32	50	400
10A5-2	3	P14494-CR-32	50	400			

Standard Enclosed Resistor Packages

Drive Part No. ACS250-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
07A0-2	2	P14494-31	35	300	P14494-31	35	300
10A5-2	3	P14494-31	35	300	P14494-31	35	300
18A0-2	5	P14494-31	35	300	P14494-32	35	820

Drive Part No. ACS250-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
07A0-2	2	P14494-31	35	300	P14494-32	35	820
10A5-2	3	P14494-32	35	820	P14494-32	35	820
18A0-2	5	P14494-32	35	820	P14494-32	35	820

NOTES:

- To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS250 UL Type 4X Drives Only

Three-phase 380-480 V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS250-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
04A1-4	2	P14494-CR-03	150	100	P14494-CR-15	150	200
05A8-4	3	P14494-CR-11	100	150	P14494-CR-22	100	300
09A5-4	5	P14494-CR-22	100	300	P14494-CR-30	100	400
14A0-4	7.5	P14494-CR-32	50	400			

Drive Part No. ACS250-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
04A1-4	2	P14494-CR-21	150	300	P14494-CR-29	150	400
05A8-4	3	P14494-CR-30	100	400			

Standard Enclosed Resistor Packages

Drive Part No. ACS250-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
04A1-4	2	P14494-15	150	300	P14494-15	150	300
05A8-4	3	P14494-15	150	300	P14494-15	150	300
09A5-4	5	P14494-19	75	300	P14494-20	75	600
14A0-4	7.5	P14494-25	45	800	P14494-25	45	800
18A0-4	10	P14494-25	45	800	P14494-26	45	1260

Drive Part No. ACS250-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
04A1-4	2	P14494-15	150	300	P14494-16	150	600
05A8-4	3	P14494-16	150	600	P14494-16	150	600
09A5-4	5	P14494-20	75	600	P14494-21	75	1000
14A0-4	7.5	P14494-26	45	1260	P14494-27	45	1920

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS250 Drives

Three-phase 575-690 V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS250-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
02A1-6	1.5	P14494-CR-02	200	100	P14494-CR-13	250	200
03A1-6	2	P14494-CR-08	250	150	P14494-CR-19	250	300
04A1-6	3	P14494-CR-22	100	300	P14494-CR-30	100	400
06A5-6	5	P14494-CR-22	100	300			

Drive Part No. ACS250-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		CR Part No. ¹	Ohms	Watts	CR Part No. ¹	Ohms	Watts
02A1-6	1.5	P14494-CR-19	250	300	P14494-CR-27	250	400
03A1-6	2	P14494-CR-19	250	300	P14494-CR-27	250	400
04A1-6	3	P14494-CR-27	250	400			

Standard Enclosed Resistor Packages

Drive Part No. ACS250-03U-	Hp	Duty Cycle=3sec on/27sec off			Duty Cycle=10sec on/50sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
02A1-6	1.5	P14494-11	250	300	P14494-11	250	300
03A1-6	2	P14494-11	250	300	P14494-11	250	300
04A1-6	3	P14494-11	250	300	P14494-11	250	300
06A5-6	5	P14494-13	200	300	P14494-14	200	600

Drive Part No. ACS250-03U-	Hp	Duty Cycle=30sec on/180sec off			Duty Cycle=60sec on/180sec off		
		Resistor Part No. ¹	Ohms	Watts	Resistor Part No. ¹	Ohms	Watts
02A1-6	1.5	P14494-11	250	300	P14494-11	250	300
03A1-6	2	P14494-11	250	300	P14494-11	250	300
04A1-6	3	P14494-12	250	600	P14494-12	250	600
06A5-6	5	P14494-14	200	600	P14494-18	150	1200
09A0-6	7.5	ABB-48431-052	80	800	P14494-63	80	1050
12A0-6	10	P14494-62	63	800	ABB-48431-140	63	1200
17A0-6	15	ABB-41163	35	900	P14494-34	35	1600
22A0-6	20	P14494-33	35	1200	ABB-44534	40	2010

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS550 Drives

Three Phase 200-240V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS550-U1-	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
04A6-2	1	internal	P14494-CR-04	100	100	internal	P14494-CR-04	100	100
06A6-2	1.5	internal	P14494-CR-04	100	100	internal	P14494-CR-11	100	150
07A5-2	2	internal	P14494-CR-04	100	100	internal	P14494-CR-16	100	200
012A-2	3	internal	P14494-CR-12	50	150	internal	P14494-CR-24	50	300
017A-2	5	internal	P14494-CR-25	45	300	internal	P14494-CR-33	45	400

Drive Part No. ACS550-U1-	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
04A6-2	1	internal	P14494-CR-11	100	150	internal	P14494-CR-16	100	200
06A6-2	1.5	internal	P14494-CR-16	100	200	internal	P14494-CR-22	100	300
07A5-2	2	internal	P14494-CR-22	100	300	internal	P14494-CR-30	100	400
012A-2	3	internal	P14494-CR-32	50	400				

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS550 Drives

Three Phase 200-240V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS550-U1-	Hp	Duty Cycle=3sec on/27sec off					Duty Cycle=10sec on/50sec off				
		Brake Module	List Price	Resistor Part No. ¹	Ohms	Watts	Brake Module	List Price	Resistor Part No. ¹	Ohms	Watts
04A6-2	1	internal	---	ABB-48431-050	80.0	400	internal	---	ABB-48431-050	80.0	400
06A6-2	1.5	internal	---	ABB-48431-050	80.0	400	internal	---	ABB-48431-050	80.0	400
07A5-2	2	internal	---	ABB-48431-020	44.0	324	internal	---	ABB-48431-020	44.0	324
012A-2	3	internal	---	ABB-48431-020	44.0	324	internal	---	ABB-48431-020	44.0	324
017A-2	5	internal	---	ABB-48431-020	44.0	324	internal	---	ABB-48431-021	44.0	800
024A-2	7.5	internal	---	ABB-48431-080	30.0	800	internal	---	ABB-48431-080	30.0	800
031A-2	10	internal	---	ABB-48431-002	22.0	819	internal	---	ABB-48431-003	22.0	1140
046A-2 ²	15	NBBM-V230-A30	\$2,080	ABB-48431-061	11.0	704	NBBM-V230-A30	\$2,080	ABB-48431-064	11.0	1584
059A-2 ²	20	NBBM-V230-A30	\$2,080	ABB-48431-092	8.5	937	NBBM-V230-A30	\$2,080	ABB-48431-154	5.3	1717
075A-2 ²	25	NBBM-V230-A30	\$2,080	ABB-48431-153	5.3	1193	NBBM-V230-A30	\$2,080	ABB-48431-155	5.3	2565
088A-2 ²	30	NBBM-V230-A30	\$2,080	ABB-41136	3.0	1500	NBBM-V230-A30	\$2,080	ABB-48431-155	5.3	2565
114A-2 ²	40	NBBM-V230-A30	\$2,080	ABB-41137	3.0	1800	NBBM-V230-A30	\$2,080	ABB-48431-156	5.3	3313
143A-2 ²	50	NBBM-V230-A30	\$2,080	ABB-41138	3.0	2100	NBBM-V230-A30	\$2,080	P14494-75	3.3	4316
178A-2 ²	60	NBBM-V230-A30	\$2,080	ABB-48431-301	2.5	2723	NBBM-V230-A80	\$2,308	ABB-48431-270	2.9	5614
221A-2 ²	75	NBBM-V230-A30	\$2,080	ABB-48431-303	2.5	3610	NBBM-V230-A80	\$2,308	ABB-48431-304	2.5	6250
248A-2 ²	100	NBBM-V230-A300	\$8,587	P14494-74	1.8	4476	NBBM-V230-A300	\$8,587	ABB-48431-390	1.7	8330

Drive Part No. ACS550-U1-	Hp	Duty Cycle=30sec on/180sec off					Duty Cycle=60sec on/180sec off				
		Brake Module	List Price	Resistor Part No. ¹	Ohms	Watts	Brake Module	List Price	Resistor Part No. ¹	Ohms	Watts
04A6-2	1	internal	---	ABB-48431-050	80.0	400	internal	---	ABB-48431-050	80.0	400
06A6-2	1.5	internal	---	ABB-48431-050	80.0	400	internal	---	ABB-48431-050	80.0	400
07A5-2	2	internal	---	ABB-48431-020	44.0	324	internal	---	ABB-48431-021	44.0	800
012A-2	3	internal	---	ABB-48431-021	44.0	800	internal	---	ABB-48431-021	44.0	800
017A-2	5	internal	---	ABB-48431-021	44.0	800	internal	---	ABB-48431-022	44.0	1263
024A-2	7.5	internal	---	P14494-60	30.0	1050	internal	---	ABB-48431-081	30.0	1600
031A-2	10	internal	---	ABB-48431-003	22.0	1140	internal	---	ABB-48431-006	22.0	2200
046A-2 ²	15	NBBM-V230-A30	\$2,080	ABB-48431-065	11.0	1859	NBBM-V230-A30	\$2,080	ABB-41169	11.0	3700
059A-2 ²	20	NBBM-V230-A30	\$2,080	ABB-48431-155	5.3	2565	NBBM-V230-A30	\$2,080	ABB-48431-159	5.3	4770
075A-2 ²	25	NBBM-V230-A30	\$2,080	ABB-48431-156	5.3	3313	NBBM-V230-A30	\$2,080	ABB-48431-160	5.3	5772
088A-2 ²	30	NBBM-V230-A30	\$2,080	ABB-48431-158	5.3	3864	NBBM-V230-A30	\$2,080	ABB-48431-161	5.3	7653
114A-2 ²	40	NBBM-V230-A30	\$2,080	ABB-48431-160	5.3	5772	NBBM-V230-A80	\$2,308	ABB-48431-161	5.3	7653
143A-2 ²	50	NBBM-V230-A80	\$2,308	ABB-41150	4.0	5600	NBBM-V230-A80	\$2,308	P14494-76	3.4	12312
178A-2 ²	60	NBBM-V230-A80	\$2,308	ABB-49173-007	2.0	8600	NBBM-V230-A80	\$2,308	ABB-42778	2.7	13500
221A-2 ²	75	NBBM-V230-A80	\$2,308	ABB-49173-007	2.0	8600	NBBM-V230-A80	\$2,308	ABB-48431-305	2.5	16000
248A-2 ²	100	NBBM-V230-A300	\$8,587	ABB-49173-009	1.4	13000	NBBM-V230-A300	\$8,587	ABB-42685	1.7	21000

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 10 Hp and optional above 10 Hp.

ACS550 Drives

Three Phase 380-480V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS550-U1-	Hp	Duty Cycle=3sec on/27sec off					Duty Cycle=10sec on/50sec off				
		Brake Module	List Price	CR Part No. ¹	Ohms	Watts	Brake Module	List Price	CR Part No. ¹	Ohms	Watts
03A3-4	1.5	internal	---	P14494-CR-02	200.0	100	internal	---	P14494-CR-09	200.0	150
04A1-4	2	internal	---	P14494-CR-02	200.0	100	internal	---	P14494-CR-14	200.0	200
05A4-4	3	internal	---	P14494-CR-10	150.0	150	internal	---	P14494-CR-21	150.0	300
06A9-4	3	internal	---	P14494-CR-10	150.0	150	internal	---	P14494-CR-21	150.0	300
08A8-4	5	internal	---	P14494-CR-22	100.0	300	internal	---	P14494-CR-30	100.0	400
012A-4	7.5	internal	---	P14494-CR-30	100.0	400					

Drive Part No. ACS550-U1-	Hp	Duty Cycle=30sec on/180sec off					Duty Cycle=60sec on/180sec off				
		Brake Module	List Price	CR Part No. ¹	Ohms	Watts	Brake Module	List Price	CR Part No. ¹	Ohms	Watts
03A3-4	1.5	internal	---	P14494-CR-14	200.0	200	internal	---	P14494-CR-20	200.0	300
04A1-4	2	internal	---	P14494-CR-20	200.0	300	internal	---	P14494-CR-28	200.0	400
05A4-4	3	internal	---	P14494-CR-29	150.0	400					
06A9-4	3	internal	---	P14494-CR-29	150.0	400					

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS550 Drives

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS550-U1-	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
03A3-4	1.5	internal	P14494-15	150	300	internal	P14494-15	150	300
04A1-4	2	internal	P14494-15	150	300	internal	P14494-15	150	300
05A4-4	3	internal	P14494-15	150	300	internal	P14494-15	150	300
06A9-4	3	internal	P14494-15	150	300	internal	P14494-15	150	300
08A8-4	5	internal	ABB-48431-051	80.0	400	internal	ABB-48431-052	80.0	800
012A-4	7.5	internal	ABB-48431-051	80.0	400	internal	ABB-48431-052	80.0	800
015A-4	10	internal	P14494-20	75	600	internal	ABB-48431-140	63.0	1200
023A-4	15	internal	P14494-62	63	800	internal	ABB-48431-140	63.0	1200
031A-4 ²	20	NBBM-V460-A30	ABB-41163	35.0	900	NBBM-V460-A30	P14494-34	35.0	1600
038A-4 ²	25	NBBM-V460-A30	P14494-60	30.0	1050	NBBM-V460-A30	ABB-48431-006	22.0	2200
045A-4 ²	30	NBBM-V460-A30	ABB-44471	22.0	1455	NBBM-V460-A30	ABB-48431-007	22.0	2426
059A-4 ²	40	NBBM-V460-A30	P14494-49	15.0	2160	NBBM-V460-A30	P14494-53	15.0	3600
072A-4 ²	50	NBBM-V460-A30	P14494-50	15.0	2450	NBBM-V460-A30	P14494-54	15.0	5000
078A-4 ²	60	NBBM-V460-A30	ABB-48431-158	5.3	3864	NBBM-V460-A80	ABB-48431-160	5.3	5772
097A-4 ²	75	NBBM-V460-A30	ABB-48431-158	5.3	3864	NBBM-V460-A80	ABB-48431-161	5.3	7653
125A-4 ²	100	NBBM-V460-A30	ABB-48431-159	5.3	4770	NBBM-V460-A80	ABB-44499	6.1	9444
157A-4 ²	125	NBBM-V460-A30	ABB-48431-160	5.3	5772	NBBM-V460-A80	ABB-48431-184	4.3	10750
180A-4 ²	150	NBBM-V460-A80	ABB-44479	4.3	9872	NBBM-V460-A80	ABB-44480	4.3	11696
246A-4 ²	200	NBBM-V460-A300	ABB-49173-005	3.5	8500	NBBM-V460-A300	ABB-48431-331	2.2	17820
316A-4 ²	250	NBBM-V460-A300	ABB-42778	2.7	13500	NBBM-V460-A300	ABB-44484	2.8	20061
368A-4 ²	300	NBBM-V460-A300	ABB-48431-330	2.2	14080	NBBM-V460-A300	ABB-48431-332	2.2	26620
414A-4 ²	350	NBBM-V460-A300	ABB-48431-392	1.7	17000	NBBM-V460-A300	ABB-48431-333	2.2	31680
486A-4 ²	400	NBBM-V460-A300	ABB-48431-392	1.7	17000	NBBM-V460-A300	ABB-48431-362	1.8	32805
526A-4 ²	450	NBBM-V460-A600	ABB-49173-010	1.4	21000	NBBM-V460-A600	ABB-48431-363	1.8	40500
602A-4 ²	500	NBBM-V460-A600	ABB-49173-010	1.4	21000	NBBM-V460-A600	ABB-48431-423	1.5	40838
645A-4 ²	550	NBBM-V460-A600	ABB-48431-450	1.4	24604	NBBM-V460-A600	ABB-44509	1.4	52037

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 15 Hp and optional above 15 Hp.

ACS550 Drives

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages (continued)

Drive Part No. ACS550-U1-	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
03A3-4	1.5	internal	P14494-15	150	300	internal	P14494-15	150	300
04A1-4	2	internal	P14494-15	150	300	internal	ABB-48431-110	120.0	600
05A4-4	3	internal	ABB-48431-051	80	400	internal	ABB-48431-110	120.0	600
06A9-4	3	internal	ABB-48431-051	80.0	400	internal	ABB-48431-052	80.0	800
08A8-4	5	internal	ABB-48431-052	80.0	800	internal	P14494-63	80.0	1050
012A-4	7.5	internal	P14494-63	80.0	1050	internal	ABB-48431-053	80.0	1600
015A-4	10	internal	ABB-48431-140	63.0	1200	internal	P14494-65	63.0	2100
023A-4	15	internal	P14494-64	63.0	1850	internal	ABB-48431-141	63.0	3000
031A-4 ²	20	NBBM-V460-A30	P14494-35	35.0	2500	NBBM-V460-A30	P14494-36	35.0	3600
038A-4 ²	25	NBBM-V460-A30	ABB-48431-008	22.0	3168	NBBM-V460-A30	ABB-48431-009	22.0	5632
045A-4 ²	30	NBBM-V460-A30	ABB-44536	22.0	3703	NBBM-V460-A30	ABB-48431-009	22.0	5632
059A-4 ²	40	NBBM-V460-A30	P14494-54	15.0	5000	NBBM-V460-A30	ABB-48431-070	11.0	8019
072A-4 ²	50	NBBM-V460-A30	P14494-55	15.0	6000	NBBM-V460-A30	ABB-44540	8.3	10834
078A-4 ²	60	NBBM-V460-A80	ABB-48431-161	5.3	7653	NBBM-V460-A30	ABB-44541	8.4	12590
097A-4 ²	75	NBBM-V460-A80	ABB-42776	4.4	9000	NBBM-V460-A80	ABB-44542	8.5	15547
125A-4 ²	100	NBBM-V460-A80	ABB-44501	4.2	15279	NBBM-V460-A80	ABB-48431-125	8.0	20000
157A-4 ²	125	NBBM-V460-A80	ABB-44501	4.2	15279	NBBM-V460-A300	ABB-48431-212	4.0	25600
180A-4 ²	150	NBBM-V460-A80	ABB-44502	4.2	18553	NBBM-V460-A300	ABB-43164	4.0	30976
246A-4 ²	200	NBBM-V460-A80	ABB-44524	4.0	24916	NBBM-V460-A300	ABB-48431-275	2.9	41760
316A-4 ²	250	NBBM-V460-A300	ABB-44525	2.7	33760	NBBM-V460-A300	ABB-43494	2.7	49208
368A-4 ²	300	NBBM-V460-A300	ABB-48431-307	2.5	36000	NBBM-V460-A300	ABB-48431-396	1.7	58183
414A-4 ²	350	NBBM-V460-A600	ABB-48431-423	1.5	40838	NBBM-V460-A300	ABB-44551	2.0	70350
486A-4 ²	400	NBBM-V460-A600	ABB-48431-364	1.8	49005	NBBM-V460-A600	ABB-43504	1.7	82280
526A-4 ²	450	NBBM-V460-A600	ABB-48431-396	1.7	58183	NBBM-V460-A600	ABB-48431-456	1.4	91260
602A-4 ²	500	NBBM-V460-A600	ABB-48431-425	1.5	60000	NBBM-V460-A600	ABB-43505	1.4	99878
645A-4 ²	550	NBBM-V460-A600	ABB-48431-455	1.4	68344	NBBM-V460-A600	ABB-48431-457	1.4	121500

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 15 Hp and optional above 15 Hp.

ACS550 Drives

Three Phase 575-600V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS550-U1-	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
02A7-6	2	internal	P14494-CR-02	200.0	100	internal	P14494-CR-13	250.0	200
03A9-6	3	internal	P14494-CR-08	250.0	150	internal	P14494-CR-19	250.0	300
06A1-6	5	internal	P14494-CR-22	100.0	300	internal	P14494-CR-30	100.0	400
09A0-6	7.5	internal	P14494-CR-30	100.0	400				

Drive Part No. ACS550-U1-	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
02A7-6	2	internal	P14494-CR-19	250.0	300	internal	P14494-CR-27	250.0	400
03A9-6	3	internal	P14494-CR-27	250.0	400				

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS550 Drives

Three Phase 575-600V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS550-U1-	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
02A7-6	2	internal	P14494-11	250.0	300	internal	P14494-11	250.0	300
03A9-6	3	internal	P14494-11	250.0	300	internal	P14494-11	250.0	300
06A1-6	5	internal	P14494-13	200.0	300	internal	P14494-14	200.0	600
09A0-6	7.5	internal	ABB-48431-052	80.0	800	internal	P14494-63	80.0	1050
011A-6	10	internal	ABB-48431-052	80.0	800	internal	P14494-63	80.0	1050
017A-6	15	internal	P14494-62	63.0	800	internal	ABB-48431-140	63.0	1200
022A-6 ²	20	NBBM-V600-A30	ABB-41163	35.0	900	NBBM-V600-A30	P14494-34	35.0	1600
027A-6 ²	25	NBBM-V600-A30	P14494-33	35.0	1200	NBBM-V600-A30	ABB-44534	40.0	2010
032A-6 ²	30	NBBM-V600-A30	P14494-34	35.0	1600	NBBM-V600-A30	P14494-35	35.0	2500
041A-6 ²	40	NBBM-V600-A30	ABB-48431-005	22.0	1862	NBBM-V600-A30	ABB-48431-008	22.0	3168
052A-6 ²	50	NBBM-V600-A30	ABB-48431-006	22.0	2200	NBBM-V600-A30	ABB-48431-009	22.0	5632
062A-6 ²	60	NBBM-V600-A30	ABB-44494	13.0	3333	NBBM-V600-A30	P14494-54	15.0	5000
077A-6 ²	75	NBBM-V600-A30	ABB-44494	13.0	3333	NBBM-V600-A30	ABB-48431-036	13.0	6292
099A-6 ²	100	NBBM-V600-A30	ABB-48431-068	11.0	4400	NBBM-V600-A30	ABB-48431-070	11.0	8019
125A-6 ²	125	NBBM-V600-A30	ABB-48431-098	8.5	6197	NBBM-V600-A30	ABB-44541	8.4	12590
144A-6 ²	150	NBBM-V600-A80	ABB-48431-161	5.3	7653	NBBM-V600-A80	ABB-48431-162	5.3	13250

Drive Part No. ACS550-U1-	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
02A7-6	2	internal	P14494-11	250.0	300	internal	P14494-11	250.0	300
03A9-6	3	internal	P14494-12	250.0	600	internal	P14494-12	250.0	600
06A1-6	5	internal	P14494-14	200.0	600	internal	P14494-18	150.0	1200
09A0-6	7.5	internal	P14494-63	80.0	1050	internal	ABB-48431-053	80.0	1600
011A-6	10	internal	ABB-48431-053	80.0	1600	internal	P14494-23	80.0	2400
017A-6	15	internal	P14494-64	63.0	1850	internal	ABB-48431-141	63.0	3000
022A-6 ²	20	NBBM-V600-A30	P14494-35	35.0	2500	NBBM-V600-A30	P14494-54	15.0	5000
027A-6 ²	25	NBBM-V600-A30	ABB-43167	40.0	2890	NBBM-V600-A30	P14494-54	15.0	5000
032A-6 ²	30	NBBM-V600-A30	P14494-36	35.0	3600	NBBM-V600-A80	ABB-48431-070	11.0	8019
041A-6 ²	40	NBBM-V600-A30	ABB-44537	22.3	4823	NBBM-V600-A80	ABB-48431-070	11.0	8019
052A-6 ²	50	NBBM-V600-A30	P14494-55	15.0	6000	NBBM-V600-A80	ABB-44540	8.3	10834
062A-6 ²	60	NBBM-V600-A30	ABB-44518	13.3	6955	NBBM-V600-A80	ABB-44541	8.4	12590
077A-6 ²	75	NBBM-V600-A30	ABB-44541	8.4	12590	NBBM-V600-A80	ABB-48431-072	11.0	15884
099A-6 ²	100	NBBM-V600-A80	ABB-44541	8.4	12590	NBBM-V600-A80	ABB-48431-102	8.5	21250
125A-6 ²	125	NBBM-V600-A80	ABB-44542	8.5	15547	NBBM-V600-A80	ABB-43160	8.5	25992
144A-6 ²	150	NBBM-V600-A80	ABB-44543	6.4	18031	NBBM-V600-A300	ABB-48431-165	5.3	29813

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 15 Hp and optional above 15 Hp.

ACS800 Drives

Three Phase 200-240V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS800-U1-	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
0001-2	1	internal	P14494-CR-04	100.0	100	internal	P14494-CR-04	100.0	100
0002-2	1.5	internal	P14494-CR-04	100.0	100	internal	P14494-CR-11	100.0	150
0003-2	2	internal	P14494-CR-05	75.0	100	internal	P14494-CR-17	75.0	200
0004-2	3	internal	P14494-CR-12	50.0	150	internal	P14494-CR-24	50.0	300
0006-2	5	internal	P14494-CR-26	40.0	300	internal	P14494-CR-34	40.0	400
0009-2	7.5	internal	P14494-CR-34	40.0	400				

Drive Part No. ACS800-U1-	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
0001-2	1	internal	P14494-CR-11	100.0	150	internal	P14494-CR-16	100.0	200
0002-2	1.5	internal	P14494-CR-16	100.0	200	internal	P14494-CR-22	100.0	300
0003-2	2	internal	P14494-CR-23	75.0	300	internal	P14494-CR-31	75.0	400
0004-2	3	internal	P14494-CR-32	50.0	400				

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS800 Drives

Three Phase 200-240V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS800-U	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
1-0001-2	1	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0002-2	1.5	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0003-2	2	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0004-2	3	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0006-2	5	Internal	ABB-48431-001	22	285	Internal	ABB-48431-002	22	819
1-0009-2	7.5	Internal	ABB-48431-002	22	819	Internal	ABB-48431-002	22	819
1-0011-2	10	Internal	ABB-41131	15	600	Internal	ABB-41144	13	1200
1-0016-2 ^{2,3}	15	NBBM-V230-A30	ABB-48431-091	8.5	719	NBBM-V230-A30	ABB-48431-093	8.5	1224
1-0020-2 ^{2,3}	20	NBBM-V230-A30	ABB-41133	8.0	900	NBBM-V230-A30	ABB-48431-095	8.5	1913
1-0025-2 ^{2,3}	25	NBBM-V230-A30	ABB-49173-001	6.8	1000	NBBM-V230-A30	ABB-41147	6.0	2400
1-0030-2 ^{2,3}	30	NBBM-V230-A30	ABB-48431-154	5.3	1717	NBBM-V230-A30	ABB-41148	6.0	3000
1-0040-2 ^{2,3}	40	NBBM-V230-A30	ABB-48431-154	5.3	1717	NBBM-V230-A30	ABB-41149	4.0	3600
1-0050-2 ^{2,3}	50	NBBM-V230-A30	ABB-48431-300	2.5	2250	NBBM-V230-A30	P14494-75	3.3	4316
1-0060-2 ^{2,3}	60	NBBM-V230-A30	ABB-48431-301	2.5	2723	NBBM-V230-A30	ABB-48431-270	2.9	5614
1-0070-2 ^{2,3}	75	NBBM-V230-A30	ABB-49173-006	2.0	3600	NBBM-V230-A30	ABB-48431-304	2.5	6250
4-0080-2 ^{2,3}	75	NBBM-V230-A30	ABB-49173-006	2.0	3600	NBBM-V230-A30	ABB-48431-304	2.5	6250
4-0100-2 ^{2,3}	100	NBBM-V230-A150	P14494-74	1.8	4476	NBBM-V230-A80	ABB-49173-007	2.0	8600
4-0120-2 ^{2,3}	100	NBBM-V230-A150	P14494-74	1.8	4476	NBBM-V230-A80	ABB-49173-007	2.0	8600
4-0140-2 ^{2,3}	150	NBBM-V230-A300	ABB-49173-011	1.0	6500	NBBM-V230-A150	ABB-49173-009	1.4	13000
4-0170-2 ^{2,3}	150	NBBM-V230-A300	ABB-49173-011	1.0	6500	NBBM-V230-A150	ABB-49173-009	1.4	13000
4-0210-2 ^{2,3}	200	NBBM-V230-A300	ABB-48431-510	1.0	12100	NBBM-V230-A300	ABB-48431-540	0.9	16403
4-0230-2 ^{2,3}	200	NBBM-V230-A300	ABB-48431-510	1.0	12100	NBBM-V230-A300	ABB-48431-540	0.9	16403
4-0260-2 ^{2,3}	250	NBBM-V230-A300	ABB-49173-012	0.7	13500	NBBM-V230-A600	ABB-48431-570	0.6	24000
4-0300-2 ^{2,3}	250	NBBM-V230-A300	ABB-49173-012	0.68	13500	NBBM-V230-A600	ABB-48431-570	0.6	24000

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 10 Hp and optional above 10 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS800 Drives

Three Phase 200-240V applications, stopping duty only

Standard Enclosed Resistor Packages (continued)

Drive Part No. ACS800-U	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
1-0001-2	1	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0002-2	1.5	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0003-2	2	Internal	ABB-48431-021	44	800	Internal	ABB-48431-021	44	800
1-0004-2	3	Internal	ABB-48431-021	44	800	Internal	ABB-48431-021	44	800
1-0006-2	5	Internal	ABB-48431-002	22	819	Internal	ABB-48431-003	22	1140
1-0009-2	7.5	Internal	ABB-48431-003	22	1140	Internal	ABB-48431-005	22	1862
1-0011-2	10	Internal	ABB-48431-030	13	1433	Internal	ABB-44473	13.5	2509
1-0016-2 ^{2,3}	15	NBBM-V230-A30	ABB-48431-095	8.5	1913	NBBM-V230-A30	ABB-41159	8	3000
1-0020-2 ^{2,3}	20	NBBM-V230-A30	ABB-48431-095	8.5	1913	NBBM-V230-A30	ABB-41170	8.0	4600
1-0025-2 ^{2,3}	25	NBBM-V230-A30	ABB-41160	6.0	3800	NBBM-V230-A30	ABB-41162	6.0	5200
1-0030-2 ^{2,3}	30	NBBM-V230-A30	ABB-41149	4.0	3600	NBBM-V230-A30	ABB-48431-183	4.3	6209
1-0040-2 ^{2,3}	40	NBBM-V230-A30	ABB-41150	4.0	5600	NBBM-V230-A30	ABB-44479	4.3	9872
1-0050-2 ^{2,3}	50	NBBM-V230-A80	ABB-48431-304	2.5	6250	NBBM-V230-A80	ABB-42778	2.7	13500
1-0060-2 ^{2,3}	60	NBBM-V230-A80	P14494-77	2.9	7200	NBBM-V230-A80	ABB-42778	2.7	13500
1-0070-2 ^{2,3}	75	NBBM-V230-A80	P14494-78	2.0	9800	NBBM-V230-A80	ABB-48431-331	2.2	17820
4-0080-2 ^{2,3}	75	NBBM-V230-A80	ABB-49173-007	2.0	8600	NBBM-V230-A80	ABB-48431-331	2.2	17820
4-0100-2 ^{2,3}	100	NBBM-V230-A150	ABB-48431-360	1.8	14580	NBBM-V230-A150	ABB-48431-361	1.8	25920
4-0120-2 ^{2,3}	100	NBBM-V230-A150	ABB-48431-360	1.8	14580	NBBM-V230-A150	ABB-48431-361	1.8	25920
4-0140-2 ^{2,3}	150	NBBM-V230-A150	ABB-49173-010	1.4	21000	NBBM-V230-A150	ABB-48431-451	1.4	30375
4-0170-2 ^{2,3}	150	NBBM-V230-A150	ABB-49173-010	1.4	21000	NBBM-V230-A150	ABB-48431-451	1.4	30375
4-0210-2 ^{2,3}	200	NBBM-V230-A300	ABB-48431-541	0.9	24503	NBBM-V230-A300	ABB-48431-515	1.0	40000
4-0230-2 ^{2,3}	200	NBBM-V230-A300	ABB-48431-541	0.9	24503	NBBM-V230-A300	ABB-48431-515	1.0	40000
4-0260-2 ^{2,3}	250	NBBM-V230-A300	ABB-48431-571	0.6	30375	NBBM-V230-A600	ABB-48431-572	0.6	54000
4-0300-2 ^{2,3}	250	NBBM-V230-A600	ABB-48431-571	0.6	30375	NBBM-V230-A600	ABB-48431-572	0.6	54000

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 10 Hp and optional above 10 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS800 Drives

Three Phase 380-480V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS800-U	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
1-0004-5	3	Internal	P14494-CR-11	100	150	Internal	P14494-CR-22	100	300
1-0005-5	3	Internal	P14494-CR-11	100	150	Internal	P14494-CR-22	100	300
1-0006-5	5	Internal	P14494-CR-22	100	300	Internal	P14494-CR-30	100	400
1-0009-5	7.5	Internal	P14494-CR-32	50	400				
1-0011-5	10	Internal	P14494-CR-41	45	500				

Drive Part No. ACS800-U	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	CR Part No. ¹	Ohms	Watts	Brake Module	CR Part No. ¹	Ohms	Watts
1-0004-5	3	Internal	P14494-CR-30	100	400				
1-0005-5	3	Internal	P14494-CR-30	100	400				

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS800 Drives

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS800-U	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
1-0004-5	3	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0005-5	3	Internal	ABB-48431-020	44	324	Internal	ABB-48431-020	44	324
1-0006-5	5	Internal	ABB-48431-020	44	324	Internal	ABB-48431-021	44	800
1-0009-5	7.5	Internal	ABB-48431-050	80	400	Internal	ABB-48431-021	44	800
1-0011-5	10	Internal	ABB-48431-021	44	800	Internal	ABB-48431-022	44	1263
1-0016-5	15	Internal	ABB-48431-002	22	819	Internal	ABB-48431-004	22	1408
1-0020-5	20	Internal	ABB-48431-003	22	1140	Internal	ABB-44472	22	1904
1-0025-5	25	Internal	ABB-48431-003	22	1140	Internal	ABB-48431-007	22	2426
1-0030-5 ^{2,3}	30	NBBM-V460-A30	ABB-41156	13	1500	NBBM-V460-A30	ABB-48431-033	13	3328
1-0040-5 ^{2,3}	40	NBBM-V460-A30	ABB-48431-031	13	1872	NBBM-V460-A30	ABB-48431-033	13	3328
1-0050-5 ^{2,3}	50	NBBM-V460-A30	ABB-48431-096	8.5	2754	NBBM-V460-A30	ABB-48431-068	11	4400
1-0060-5 ^{2,3}	60	NBBM-V460-A30	ABB-48431-096	8.5	2754	NBBM-V460-A30	ABB-48431-097	8.5	5313
1-0070-5 ^{2,3}	75	NBBM-V460-A30	ABB-41170	8	4600	NBBM-V460-A30	ABB-48431-098	8.5	6197
1-0100-5 ^{2,3}	100	NBBM-V460-A30	ABB-48431-159	5.3	4770	NBBM-V460-A30	ABB-42776	4.4	9000
1-0120-5 ^{2,3}	125	NBBM-V460-A30	ABB-48431-183	4.3	6209	NBBM-V460-A80	ABB-48431-184	4.3	10750
1-0140-5 ^{2,3}	150	NBBM-V460-A30	ABB-44479	4.26	9872	NBBM-V460-A80	ABB-44480	4.26	11696
1-0205-5 ^{2,3}	200	NBBM-V460-A30	ABB-44479	4.26	9872	NBBM-V460-A80	ABB-44503	4.02	16083
4-0170-5 ^{2,3}	150	NBBM-V460-A30	P14494-79	3.9	7898	NBBM-V460-A80	ABB-44480	4.26	11696
4-0210-5 ^{2,3}	200	NBBM-V460-A150	P14494-80	2.88	10360	NBBM-V460-A150	ABB-48431-272	2.9	16313
4-0260-5 ^{2,3}	200	NBBM-V460-A150	P14494-80	2.88	10360	NBBM-V460-A150	ABB-48431-272	2.9	16313
4-0270-5 ^{2,3}	250	NBBM-V460-A150	P14494-82	2.7	13230	NBBM-V460-A150	ABB-44484	2.75	20061
4-0300-5 ^{2,3}	300	NBBM-V460-A300	ABB-48431-330	2.2	14080	NBBM-V460-A300	ABB-48431-332	2.2	26620
4-0320-5 ^{2,3}	350	NBBM-V460-A300	ABB-48431-331	2.2	17820	NBBM-V460-A300	ABB-48431-333	2.2	31680
4-0400-5 ^{2,3}	400	NBBM-V460-A300	ABB-48431-392	1.7	17000	NBBM-V460-A300	ABB-48431-362	1.8	32805
4-0440-5 ^{2,3}	450	NBBM-V460-A300	ABB-49173-010	1.4	21000	NBBM-V460-A300	ABB-48431-453	1.35	46204
4-0490-5 ^{2,3}	500	NBBM-V460-A300	ABB-48431-450	1.35	24604	NBBM-V460-A300	ABB-48431-453	1.35	46204
4-0550-5 ^{2,3}	550	NBBM-V460-A300	ABB-48431-450	1.35	24604	NBBM-V460-A300	ABB-48431-453	1.35	46204
4-0610-5 ^{2,3}	600	NBBM-V460-A300	ABB-48431-450	1.35	24604	NBBM-V460-A300	ABB-48431-453	1.35	46204

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 10 Hp and optional above 10 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS800 Drives

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages (continued)

Drive Part No. ACS800-U	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
1-0004-5	3	Internal	ABB-48431-021	44	800	Internal	ABB-48431-021	44	800
1-0005-5	3	Internal	ABB-48431-021	44	800	Internal	ABB-48431-021	44	800
1-0006-5	5	Internal	ABB-48431-021	44	800	Internal	ABB-48431-022	44	1263
1-0009-5	7.5	Internal	ABB-48431-022	44	1263	Internal	P14494-27	45	1920
1-0011-5	10	Internal	ABB-48431-022	44	1263	Internal	ABB-48431-054	44	2200
1-0016-5	15	Internal	ABB-48431-005	22	1862	Internal	ABB-48431-008	22	3168
1-0020-5	20	Internal	ABB-48431-007	22	2426	Internal	ABB-48431-009	22	5632
1-0025-5	25	Internal	ABB-48431-008	22	3168	Internal	ABB-48431-009	22	5632
1-0030-5 ^{2,3}	30	NBBM-V460-A30	ABB-44474	13	3558	NBBM-V460-A30	ABB-48431-036	13	6292
1-0040-5 ^{2,3}	40	NBBM-V460-A30	ABB-44517	13.3	5093	NBBM-V460-A30	ABB-48431-037	13	8125
1-0050-5 ^{2,3}	50	NBBM-V460-A30	ABB-48431-069	11	6875	NBBM-V460-A30	ABB-44540	8.32	10834
1-0060-5 ^{2,3}	60	NBBM-V460-A30	ABB-48431-121	8	7200	NBBM-V460-A30	ABB-44541	8.42	12590
1-0070-5 ^{2,3}	75	NBBM-V460-A30	ABB-44520	8.32	9920	NBBM-V460-A30	ABB-44542	8.52	15547
1-0100-5 ^{2,3}	100	NBBM-V460-A80	ABB-44501	4.2	15279	NBBM-V460-A80	ABB-48431-211	4	22500
1-0120-5 ^{2,3}	125	NBBM-V460-A80	ABB-44501	4.2	15279	NBBM-V460-A80	ABB-48431-164	5.3	25970
1-0140-5 ^{2,3}	150	NBBM-V460-A80	ABB-48431-211	4	22500	NBBM-V460-A80	ABB-43164	4	30976
1-0205-5 ^{2,3}	200	NBBM-V460-A80	ABB-48431-212	4	25600	NBBM-V460-A80	ABB-48431-214	4	40000
4-0170-5 ^{2,3}	150	NBBM-V460-A80	ABB-44502	4.2	18553	NBBM-V460-A80	ABB-43164	4	30976
4-0210-5 ^{2,3}	200	NBBM-V460-A150	ABB-44506	2.76	28553	NBBM-V460-A150	ABB-44528	2.7	40835
4-0260-5 ^{2,3}	200	NBBM-V460-A150	ABB-44506	2.76	28553	NBBM-V460-A150	ABB-44528	2.7	40835
4-0270-5 ^{2,3}	250	NBBM-V460-A150	ABB-44506	2.76	28553	NBBM-V460-A150	ABB-43494	2.74	49208
4-0300-5 ^{2,3}	300	NBBM-V460-A300	ABB-48431-334	2.2	40095	NBBM-V460-A300	ABB-44551	2.02	70350
4-0320-5 ^{2,3}	350	NBBM-V460-A300	ABB-44529	2.02	49941	NBBM-V460-A300	ABB-44551	2.02	70350
4-0400-5 ^{2,3}	400	NBBM-V460-A300	ABB-48431-396	1.7	58183	NBBM-V460-A300	ABB-43504	1.72	82280
4-0440-5 ^{2,3}	450	NBBM-V460-A300	ABB-48431-454	1.35	54000	NBBM-V460-A300	ABB-48431-456	1.35	91260
4-0490-5 ^{2,3}	500	NBBM-V460-A300	ABB-48431-455	1.35	68344	NBBM-V460-A300	ABB-44553	1.38	104527
4-0550-5 ^{2,3}	550	NBBM-V460-A300	ABB-48431-455	1.35	68344	NBBM-V460-A600	ABB-44553	1.38	104527
4-0610-5 ^{2,3}	600	NBBM-V460-A300	ABB-44531	1.38	73045	NBBM-V460-A300	ABB-48431-457	1.35	121500

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 10 Hp and optional above 10 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS800 Drives (-PC & -07)

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS800-PC/U7	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
0170-5 ²	150	NBBM-V460-A80	P14494-79	3.9	7898	NBBM-V460-A80	ABB-44480	4.3	11696
0210-5 ²	200	NBBM-V460-A300	P14494-80	2.9	10360	NBBM-V460-A300	ABB-48431-272	2.9	16313
0260-5 ²	200	NBBM-V460-A300	P14494-80	2.9	10360	NBBM-V460-A300	ABB-48431-272	2.9	16313
0270-5 ²	250	NBBM-V460-A300	P14494-82	2.7	13230	NBBM-V460-A300	ABB-44484	2.8	20061
0300-5 ²	300	NBBM-V460-A300	ABB-48431-330	2.2	14080	NBBM-V460-A600	ABB-48431-393	1.7	24480
0320-5 ²	350	NBBM-V460-A600	ABB-48431-392	1.7	17000	NBBM-V460-A600	ABB-44486	1.7	29860
0400-5 ²	400	NBBM-V460-A600	ABB-48431-420	1.5	18150	NBBM-V460-A600	ABB-44487	1.4	35644
0440-5 ²	450	NBBM-V460-A600	ABB-49173-010	1.4	21000	NBBM-V460-A600	ABB-48431-453	1.4	46204
0490-5 ²	500	NBBM-V460-A600	ABB-48431-450	1.4	24604	NBBM-V460-A600	ABB-48431-453	1.4	46204
0550-5 ²	550	NBBM-V460-A600	ABB-42785	1.3	30000	NBBM-V460-A600	ABB-48431-453	1.4	46204
0610-5 ²	600	NBBM-V460-A600	ABB-48431-512	1	27225	NBBM-V460-A600	ABB-48431-516	1	50625

Drive Part No. ACS800-PC/U7	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
0170-5 ²	150	NBBM-V460-A80	ABB-44502	4.2	18553	NBBM-V460-A300	ABB-43164	4	30976
0210-5 ²	200	NBBM-V460-A300	ABB-44506	2.8	28553	NBBM-V460-A300	ABB-44528	2.7	40835
0260-5 ²	200	NBBM-V460-A300	ABB-44506	2.8	28553	NBBM-V460-A300	ABB-44528	2.7	40835
0270-5 ²	250	NBBM-V460-A300	ABB-44506	2.8	28553	NBBM-V460-A300	ABB-43494	2.7	49208
0300-5 ²	300	NBBM-V460-A600	ABB-44487	1.4	35644	NBBM-V460-A600	ABB-48431-396	1.7	58183
0320-5 ²	350	NBBM-V460-A600	ABB-44508	1.7	43916	NBBM-V460-A600	ABB-43497	1.4	70178
0400-5 ²	400	NBBM-V460-A600	ABB-48431-424	1.5	51338	NBBM-V460-A600	ABB-48431-426	1.5	75938
0440-5 ²	450	NBBM-V460-A600	ABB-48431-454	1.4	54000	NBBM-V460-A600	ABB-48431-456	1.4	91260
0490-5 ²	500	NBBM-V460-A600	ABB-48431-455	1.4	68344	NBBM-V460-A600	ABB-48431-457	1.4	121500
0550-5 ²	550	NBBM-V460-A600	ABB-48431-455	1.4	68344	NBBM-V460-A600	ABB-48431-485	1.2	108000
0610-5 ²	600	NBBM-V460-A600	ABB-48431-517	1	67600	NBBM-V460-A600	ABB-48431-519	1	122500

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 25 Hp and optional above 25 Hp.

ACS800 Drives

Three Phase 575-600V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS800-U	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
1-0011-7	10	Internal	ABB-48431-021	44	800	Internal	ABB-48431-022	44	1263
1-0016-7	10	Internal	ABB-48431-021	44	800	Internal	ABB-48431-022	44	1263
1-0020-7	15	Internal	ABB-48431-021	44	800	Internal	ABB-48431-022	44	1263
1-0025-7	20	Internal	ABB-48431-022	44	1263	Internal	P14494-68	60	1680
1-0030-7	25	Internal	ABB-48431-003	22	1140	Internal	ABB-48431-006	22	2200
1-0040-7	30	Internal	ABB-48431-004	22	1408	Internal	ABB-48431-007	22	2426
1-0050-7 ^{2,3}	40	NBBM-V600-A30	ABB-48431-095	8.5	1913	NBBM-V600-A30	P14494-59	10	3600
1-0060-7 ^{2,3}	50	NBBM-V600-A30	ABB-48431-096	8.5	2754	NBBM-V600-A30	ABB-44475	8.06	4358
1-0070-7 ^{2,3}	60	NBBM-V600-A30	ABB-48431-096	8.5	2754	NBBM-V600-A30	ABB-44476	8.06	5119
1-0100-7 ^{2,3}	75	NBBM-V600-A30	ABB-48431-067	11	3564	NBBM-V600-A30	ABB-48431-120	8	6272
1-0120-7 ^{2,3}	100	NBBM-V600-A30	ABB-48431-068	11	4400	NBBM-V600-A30	ABB-44519	8.32	8444
1-0145-7 ^{2,3}	125	NBBM-V600-A30	ABB-44496	8.06	5592	NBBM-V600-A30	ABB-44540	8.32	10834
1-0175-7 ^{2,3}	150	NBBM-V600-A30	ABB-44477	8.14	6863	NBBM-V600-A30	ABB-44541	8.42	12590
1-0205-7 ^{2,3}	200	NBBM-V600-A30	ABB-44500	6.44	10892	NBBM-V600-A30	ABB-44522	6.39	16282
4-0140-7 ^{2,3}	125	NBBM-V600-A30	ABB-44496	8.06	5592	NBBM-V600-A30	ABB-44500	6.44	10892
4-0170-7 ^{2,3}	150	NBBM-V600-A30	ABB-44477	8.14	6863	NBBM-V600-A30	ABB-44541	8.42	12590
4-0210-7 ^{2,3}	150/ 200	NBBM-V600-A30	ABB-44500	6.44	10892	NBBM-V600-A80	ABB-44522	6.39	16282
4-0260-7 ^{2,3}	150/ 200	NBBM-V600-A30	ABB-44500	6.44	10892	NBBM-V600-A80	ABB-44522	6.39	16282
4-0320-7 ^{2,3}	300	NBBM-V600-A80	ABB-48431-271	2.9	14210	NBBM-V600-A80	ABB-44524	4	24916
4-0400-7 ^{2,3}	350	NBBM-V600-A80	ABB-48431-272	2.9	16313	NBBM-V600-A80	ABB-48431-274	2.9	29000
4-0440-7 ^{2,3}	400	NBBM-V600-A80	ABB-44484	2.75	20061	NBBM-V600-A80	ABB-44525	2.71	33760
4-0490-7 ^{2,3}	450	NBBM-V600-A80	ABB-44484	2.75	20061	NBBM-V600-A150	ABB-44528	2.7	40835
4-0550-7 ^{2,3}	500	NBBM-V600-A80	ABB-48431-306	2.5	25000	NBBM-V600-A150	ABB-48431-334	2.2	40095
4-0610-7 ^{2,3}	550	NBBM-V600-A80	ABB-48431-332	2.2	26620	NBBM-V600-A150	ABB-44529	2.02	49941

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables
2. The Brake Module is supplied as standard up to 30 Hp and optional above 30 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS800 Drives

Three Phase 575-600V applications, stopping duty only

Standard Enclosed Resistor Packages (continued)

Drive Part No. ACS800-U	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
1-0011-7	10	Internal	ABB-48431-022	44	1263	Internal	P14494-27	45	1920
1-0016-7	10	Internal	ABB-48431-022	44	1263	Internal	P14494-27	45	1920
1-0020-7	15	Internal	P14494-27	45	1920	Internal	P14494-29	45	3200
1-0025-7	20	Internal	P14494-28	45	2450	Internal	P14494-30	45	4400
1-0030-7	25	Internal	ABB-43167	40	2890	Internal	ABB-44537	22.32	4823
1-0040-7	30	Internal	ABB-44516	22.75	3683	Internal	ABB-48431-009	22	5632
1-0050-7 ^{2,3}	40	NBBM-V600-A30	ABB-44537	22.32	4823	NBBM-V600-A30	ABB-48431-011	22	8800
1-0060-7 ^{2,3}	50	NBBM-V600-A30	P14494-55	15	6000	NBBM-V600-A30	ABB-43170	24	10648
1-0070-7 ^{2,3}	60	NBBM-V600-A30	ABB-44518	13.3	6955	NBBM-V600-A30	ABB-48431-038	13	11700
1-0100-7 ^{2,3}	75	NBBM-V600-A30	ABB-44520	8.32	9920	NBBM-V600-A30	ABB-48431-072	11	15884
1-0120-7 ^{2,3}	100	NBBM-V600-A30	ABB-44541	8.42	12590	NBBM-V600-A30	ABB-48431-073	11	21296
1-0145-7 ^{2,3}	125	NBBM-V600-A30	ABB-44542	8.52	15547	NBBM-V600-A80	ABB-43160	8.52	25992
1-0175-7 ^{2,3}	150	NBBM-V600-A80	ABB-44543	6.39	18031	NBBM-V600-A80	ABB-43175	8	29768
1-0205-7 ^{2,3}	200	NBBM-V600-A80	ABB-44544	6.39	21955	NBBM-V600-A80	ABB-48431-128	8	39200
4-0140-7 ^{2,3}	125	NBBM-V600-A30	ABB-44542	8.52	15547	NBBM-V600-A80	ABB-43160	8.52	25992
4-0170-7 ^{2,3}	150	NBBM-V600-A80	ABB-44543	6.39	18031	NBBM-V600-A80	ABB-43175	8	29768
4-0210-7 ^{2,3}	150/ 200	NBBM-V600-A80	ABB-44544	6.39	21955	NBBM-V600-A80	ABB-48431-128	8	39200
4-0260-7 ^{2,3}	150/ 200	NBBM-V600-A80	ABB-44544	6.39	21955	NBBM-V600-A80	ABB-48431-128	8	39200
4-0320-7 ^{2,3}	300	NBBM-V600-A150	ABB-48431-244	3.6	36000	NBBM-V600-A300	ABB-44550	2.77	56900
4-0400-7 ^{2,3}	350	NBBM-V600-A150	ABB-48431-245	3.6	43560	NBBM-V600-A300	P14494-83	3.2	70000
4-0440-7 ^{2,3}	400	NBBM-V600-A300	ABB-43494	2.74	49208	NBBM-V600-A300	P14494-84	2.8	90000
4-0490-7 ^{2,3}	450	NBBM-V600-A300	ABB-44550	2.77	56900	NBBM-V600-A300	P14494-84	2.8	90000
4-0550-7 ^{2,3}	500	NBBM-V600-A300	ABB-43503	2.27	68450	NBBM-V600-A300	P14494-85	2.3	100000
4-0610-7 ^{2,3}	550	NBBM-V600-A300	ABB-43503	2.27	68450	NBBM-V600-A300	P14494-86	2.3	110000

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables
2. The Brake Module is supplied as standard up to 30 Hp and optional above 30 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS850 Drives

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS850-04-	Hp	Duty Cycle=3sec on/27sec off				Duty Cycle=10sec on/50sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
06A0-5	3	Internal	P14494-61	120	300	Internal	P14494-61	120	300
08A0-5	5	Internal	P14494-61	120	300	Internal	ABB-48431-110	120	600
010A-5	5	Internal	ABB-48431-050	80	400	Internal	ABB-48431-052	80	800
014A-5	7.5	Internal	ABB-41152	45	600	Internal	P14494-25	45	800
018A-5	10	Internal	ABB-41152	45	600	Internal	P14494-26	45	1260
025A-5	15	Internal	ABB-48431-002	22	819	Internal	ABB-48431-004	22	1408
030A-5	20	Internal	ABB-41154	22	900	Internal	ABB-48431-005	22	1862
035A-5	23	Internal	ABB-48431-003	22	1140	Internal	ABB-44472	22	1904
044A-5	30	Internal	ABB-48431-030	13.0	1433	Internal	ABB-48431-033	13.0	3328
010A-5	30	Internal	ABB-48431-030	13.0	1433	Internal	ABB-48431-033	13.0	3328
061A-5	40	Internal	ABB-48431-031	13.0	1872	Internal	ABB-48431-033	13.0	3328
078A-5	50	Internal	ABB-48431-033	13.0	3328	Internal	ABB-44495	13.0	4153
094A-5 ^{2,3}	60	Internal	ABB-48431-033	13.0	3328	Internal	ABB-48431-036	13.0	6292
103A-5 ^{2,3}	75	NBBM-V460-A30	ABB-41170	8.00	4600	NBBM-V460-A30	ABB-48431-120	8.00	6272
144A-5 ^{2,3}	100	NBBM-V460-A30	ABB-41161	6.00	4600	NBBM-V460-A80	ABB-44499	6.10	9444
166A-5 ^{2,3}	125	NBBM-V460-A80	ABB-48431-183	4.30	6209	NBBM-V460-A80	ABB-48431-184	4.30	10750
202A-5 ^{2,3}	150	NBBM-V460-A80	ABB-44479	4.26	9872	NBBM-V460-A80	ABB-44480	4.26	11696
225A-5 ^{2,3}	150	NBBM-V460-A80	ABB-44479	4.26	9872	NBBM-V460-A80	ABB-44480	4.26	11696
260A-5 ^{2,3}	200	NBBM-V460-A80	ABB-44479	4.26	9872	NBBM-V460-A80	ABB-48431-185	4.30	17067
290A-5 ^{2,3}	200	NBBM-V460-A300	ABB-48431-271	2.90	14210	NBBM-V460-A300	ABB-48431-272	2.90	16313
430A-5 ^{2,3}	350	NBBM-V460-A300	ABB-48431-331	2.20	17820	NBBM-V460-A300	ABB-48431-333	2.20	31680
521A-5 ^{2,3}	450	NBBM-V460-A300	ABB-48431-393	1.70	24480	NBBM-V460-A300	ABB-44508	1.72	43916
602A-5 ^{2,3}	500	NBBM-V460-A600	ABB-48431-450	1.35	24604	NBBM-V460-A600	ABB-48431-453	1.35	46204
693A-5 ^{2,3}	550	NBBM-V460-A600	ABB-48431-512	1.00	27225	NBBM-V460-A600	ABB-48431-516	1.00	50625
720A-5 ^{2,3}	600	NBBM-V460-A600	ABB-48431-512	1.00	27225	NBBM-V460-A600	ABB-48431-516	1.00	50625

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 60 Hp and optional above 60 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS850 Drives

Three Phase 380-480V applications, stopping duty only

Standard Enclosed Resistor Packages (continued)

Drive Part No. ACS850-04-	Hp	Duty Cycle=30sec on/180sec off				Duty Cycle=60sec on/180sec off			
		Brake Module	Resistor Part No. ¹	Ohms	Watts	Brake Module	Resistor Part No. ¹	Ohms	Watts
06A0-5	3	Internal	ABB-48431-110	120	600	Internal	P14494-17	150	900
08A0-5	5	Internal	ABB-48431-110	120	600	Internal	P14494-18	150	1200
010A-5	5	Internal	ABB-48431-052	80	800	Internal	ABB-48431-053	80	1600
014A-5	7.5	Internal	P14494-26	45	1260	Internal	P14494-27	45	1920
018A-5	10	Internal	P14494-26	45	1260	Internal	P14494-28	45	2450
025A-5	15	Internal	ABB-48431-005	22	1862	Internal	ABB-48431-008	22	3168
030A-5	20	Internal	ABB-48431-007	22	2426	Internal	ABB-48431-009	22	5632
035A-5	23	Internal	ABB-44515	22	2910	Internal	ABB-48431-009	22	5632
044A-5	30	Internal	ABB-44474	13.0	3558	Internal	ABB-48431-036	13.0	6292
010A-5	30	Internal	ABB-44474	13.0	3558	Internal	ABB-48431-036	13.0	6292
061A-5	40	Internal	ABB-44517	13.3	5093	Internal	ABB-48431-037	13.0	8125
078A-5	50	Internal	ABB-48431-036	13.0	6292	Internal	ABB-48431-038	13.0	11700
094A-5 ^{2,3}	60	Internal	ABB-48431-037	13.0	8125	Internal	ABB-48431-038	13.0	11700
103A-5 ^{2,3}	75	NBBM-V460-A30	ABB-48431-122	8.00	11552	NBBM-V460-A80	ABB-48431-123	8.00	15488
144A-5 ^{2,3}	100	NBBM-V460-A80	ABB-44500	6.44	10892	NBBM-V460-A80	ABB-44544	6.39	21955
166A-5 ^{2,3}	125	NBBM-V460-A80	ABB-48431-185	4.30	17067	NBBM-V460-A300	ABB-48431-187	4.30	27520
202A-5 ^{2,3}	150	NBBM-V460-A80	ABB-48431-186	4.30	21070	NBBM-V460-A300	ABB-48431-188	4.30	34830
225A-5 ^{2,3}	150	NBBM-V460-A80	ABB-48431-186	4.30	21070	NBBM-V460-A300	ABB-48431-188	4.30	34830
260A-5 ^{2,3}	200	NBBM-V460-A80	ABB-48431-187	4.30	27520	NBBM-V460-A300	ABB-48431-189	4.30	43000
290A-5 ^{2,3}	200	NBBM-V460-A300	ABB-48431-273	2.90	23490	NBBM-V460-A300	ABB-48431-275	2.90	41760
430A-5 ^{2,3}	350	NBBM-V460-A300	ABB-48431-334	2.20	40095	NBBM-V460-A300	ABB-43503	2.27	68450
521A-5 ^{2,3}	450	NBBM-V460-A300	ABB-48431-396	1.70	58183	NBBM-V460-A600	ABB-43504	1.72	82280
602A-5 ^{2,3}	500	NBBM-V460-A600	ABB-48431-455	1.35	68344	NBBM-V460-A600	ABB-44553	1.38	104527
693A-5 ^{2,3}	550	NBBM-V460-A600	ABB-48431-517	1.00	67600	NBBM-V460-A600	ABB-48431-519	1.00	122500
720A-5 ^{2,3}	600	NBBM-V460-A600	ABB-48431-518	1.00	90000	NBBM-V460-A600	ABB-48431-519	1.00	122500

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 60 Hp and optional above 60 Hp.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS880 Drives

Three Phase 208-240V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=3sec on/27sec off					Duty Cycle=10sec on/50sec off				
		Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts
04A6-2	1	Internal	180	P14494-CR-02	200	100	Internal	180	P14494-CR-02	200	100
06A6-2	1.5	Internal	180	P14494-CR-02	200	100	Internal	180	P14494-CR-09	200	150
07A5-2	2	Internal	65	P14494-CR-43	65	100	Internal	65	P14494-CR-45	65	200
10A6-2	3	Internal	65	P14494-CR-44	65	150	Internal	65	P14494-CR-46	65	300
16A8-2	5	Internal	18	P14494-CR-54	18	300	Internal	18	P14494-CR-56	18	500
24A3-2	7.5	Internal	18	P14494-CR-55	18	400					

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=30sec on/180sec off					Duty Cycle=60sec on/180sec off				
		Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts
04A6-2	1	Internal	180	P14494-CR-09	200	150	Internal	180	P14494-CR-14	200	200
06A6-2	1.5	Internal	180	P14494-CR-14	200	200	Internal	180	P14494-CR-20	200	300
07A5-2	2	Internal	65	P14494-CR-46	65	300	Internal	65	P14494-CR-47	65	400
10A6-2	3	Internal	65	P14494-CR-47	65	400					

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS880 Drives

Three Phase 208-240V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=3sec on/27sec off					Duty Cycle=10sec on/50sec off				
		Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts
04A6-2	1	Internal	180	P14494-13	200	300	Internal	180	P14494-13	200	300
06A6-2	1.5	Internal	180	P14494-13	200	300	Internal	180	P14494-13	200	300
07A5-2	2	Internal	65	P14494-87	65	400	Internal	65	P14494-87	65	400
10A6-2	3	Internal	65	P14494-87	65	400	Internal	65	P14494-87	65	400
16A8-2	5	Internal	18	ABB-41130	18	300	Internal	18	P14494-40	21	750
24A3-2	7.5	Internal	18	P14494-88	18	700	Internal	18	P14494-88	18	700
031A-2	10	Internal	13	P14494-72	13	700	Internal	13	ABB-41144	13	1200
046A-2	15	Internal	12	P14494-72	13	700	Internal	12	ABB-41156	13	1500
061A-2	20	Internal	12	ABB-41144	13	1200	Internal	12	ABB-48431-031	13	1872
075A-2 ^{2,3}	25	NBBM-V230-A30	6	P14494-89	6	1200	NBBM-V230-A30	6	ABB-41147	6	2400
087A-2 ^{2,3}	30	NBBM-V230-A30	6	P14494-90	6	1600	NBBM-V230-A30	6	ABB-41147	6	2400
115A-2 ^{2,3}	40	NBBM-V230-A30	3.5	P14494-91	3.6	1900	NBBM-V230-A30	3.5	P14494-92	3.5	3600
145A-2 ^{2,3}	50	NBBM-V230-A30	3.5	ABB-49173-004	3.5	2250	NBBM-V230-A30	3.5	P14494-93	3.6	4700
170A-2 ^{2,3}	60	NBBM-V230-A30	2.4	ABB-48431-301	2.5	2723	NBBM-V230-A30	2.4	ABB-48431-304	2.5	6250
206A-2 ^{2,3}	75	NBBM-V230-A30	2.4	ABB-48431-303	2.5	3610	NBBM-V230-A30	2.4	ABB-48431-304	2.5	6250
274A-2 ^{2,3}	100	NBBM-V230-A150	1.8	P14494-74	1.79	4476	NBBM-V230-A150	1.8	ABB-48431-390	1.7	8330

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=30sec on/180sec off					Duty Cycle=60sec on/180sec off				
		Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts
04A6-2	1	Internal	180	P14494-13	200	300	Internal	180	P14494-13	200	300
06A6-2	1.5	Internal	180	P14494-13	200	300	Internal	180	ABB-41311	200	600
07A5-2	2	Internal	65	P14494-87	65	400	Internal	65	P14494-87	65	400
10A6-2	3	Internal	65	P14494-87	65	400	Internal	65	P14494-62	63	800
16A8-2	5	Internal	18	P14494-40	21	750	Internal	18	P14494-40	21	750
24A3-2	7.5	Internal	18	P14494-98	18	1200	Internal	18	P14494-99	18	1600
031A-2	10	Internal	13	ABB-41144	13	1200	Internal	13	ABB-41157	13	2100
046A-2	15	Internal	12	ABB-48431-031	13	1872	Internal	12	ABB-48431-033	13	3328
061A-2	20	Internal	12	ABB-48431-033	13	3328	Internal	12	ABB-44495	13	4153
075A-2 ^{2,3}	25	NBBM-V230-A30	6	ABB-41148	6	3000	NBBM-V230-A30	6	ABB-41162	6	5200
087A-2 ^{2,3}	30	NBBM-V230-A30	6	ABB-41160	6	3800	NBBM-V230-A30	6	P14494-100	6	6100
115A-2 ^{2,3}	40	NBBM-V230-A30	3.5	P14494-93	3.6	4700	NBBM-V230-A30	3.5	ABB-49173-005	3.5	8500
145A-2 ^{2,3}	50	NBBM-V230-A30	3.5	P14494-94	3.6	5800	NBBM-V230-A80	3.5	P14494-97	3.5	12600
170A-2 ^{2,3}	60	NBBM-V230-A80	2.4	P14494-101	2.5	9000	NBBM-V230-A80	2.4	P14494-102	2.5	12300
206A-2 ^{2,3}	75	NBBM-V230-A80	2.4	P14494-101	2.5	9000	NBBM-V230-A80	2.4	ABB-48431-305	2.5	16000
274A-2 ^{2,3}	100	NBBM-V230-A150	1.8	ABB-48431-360	1.8	14580	NBBM-V230-A150	1.8	P14494-103	1.8	21000

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 20 HP and optional above 20 HP.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS880 Drives

Three Phase 440-480V applications, stopping duty only

Type CR Resistors (available for the small Hp drives as listed below)

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=3sec on/27sec off					Duty Cycle=10sec on/50sec off				
		Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts
02A1-5	1	Internal	210	P14494-CR-39	250	100	Internal	210	P14494-CR-39	250	100
03A0-5	1.5	Internal	210	P14494-CR-39	250	100	Internal	210	P14494-CR-13	250	200
03A4-5	2	Internal	210	P14494-CR-39	250	100	Internal	210	P14494-CR-13	250	200
04A8-5	3	Internal	210	P14494-CR-49	210	150	Internal	210	P14494-CR-51	210	300
05A2-5	3	Internal	78	P14494-CR-11	100	150	Internal	78	P14494-CR-22	100	300
07A6-5	5	Internal	78	P14494-CR-22	100	300	Internal	78	P14494-CR-57	100	500
11A0-5	7.5	Internal	78	P14494-CR-58	80	400					
014A-5	10	Internal	39	P14494-CR-40	50	500					

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=30sec on/180sec off					Duty Cycle=60sec on/180sec off				
		Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	CR Part No. ¹	Ohms	Watts
02A1-5	1	Internal	210	P14494-CR-08	250	150	Internal	210	P14494-CR-13	250	200
03A0-5	1.5	Internal	210	P14494-CR-13	250	200	Internal	210	P14494-CR-19	250	300
03A4-5	2	Internal	210	P14494-CR-19	250	300	Internal	210	P14494-CR-27	250	400
04A8-5	3	Internal	210	P14494-CR-52	210	400					
05A2-5	3	Internal	78	P14494-CR-58	80	400					

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.

ACS880 Drives

Three Phase 440-480V applications, stopping duty only

Standard Enclosed Resistor Packages

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=3sec on/27sec off					Duty Cycle=10sec on/50sec off				
		Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts
02A1-5	1	Internal	210	P14494-11	250	300	Internal	210	P14494-11	250	300
03A0-5	1.5	Internal	210	P14494-11	250	300	Internal	210	P14494-11	250	300
03A4-5	2	Internal	210	P14494-11	250	300	Internal	210	P14494-11	250	300
04A8-5	3	Internal	210	P14494-11	250	300	Internal	210	P14494-11	250	300
05A2-5	3	Internal	78	P14494-15	150	300	Internal	78	P14494-15	150	300
07A6-5	5	Internal	78	ABB-41304	100	300	Internal	78	ABB-41313	100	600
11A0-5	7.5	Internal	78	ABB-48431-050	80	400	Internal	78	ABB-48431-052	80	800
014A-5	10	Internal	39	P14494-25	45	800	Internal	39	P14494-26	45	1260
021A-5	15	Internal	39	ABB-43390	40	800	Internal	39	ABB-44512	40.6	1303
027A-5	20	Internal	19	P14494-41	21	1050	Internal	19	P14494-43	21	2000
034A-5	25	Internal	19	P14494-104	19	1200	Internal	19	P14494-105	19	2000
040A-5	30	Internal	13	P14494-48	15	1550	Internal	13	P14494-50	15	2450
052A-5	40	Internal	13	ABB-48431-031	13	1872	Internal	13	ABB-48431-033	13	3328
065A-5 ^{2,3}	50	NBBM-V460-A30	8	ABB-41158	8	2400	NBBM-V460-A30	8	ABB-41170	8	4600
077A-5 ^{2,3}	60	NBBM-V460-A30	8	ABB-41159	8	3000	NBBM-V460-A30	8	ABB-44476	8.06	5119
096A-5 ^{2,3}	75	NBBM-V460-A30	5.4	ABB-41160	6	3800	NBBM-V460-A30	5.4	P14494-100	6	6100
124A-5 ^{2,3}	100	NBBM-V460-A30	5.4	P14494-109	5.4	4500	NBBM-V460-A30	5.4	P14494-110	5.4	8640
156A-5 ^{2,3}	125	NBBM-V460-A30	3.3	ABB-41150	4	5600	NBBM-V460-A30	3.3	P14494-121	4	10000
180A-5 ^{2,3}	150	NBBM-V460-A150	3.3	P14494-95	3.6	7300	NBBM-V460-A150	3.3	P14494-97	3.5	12600
240A-5 ^{2,3}	200	NBBM-V460-A300	2.3	P14494-101	2.5	9000	NBBM-V460-A300	2.3	ABB-48431-305	2.5	16000
260A-5 ^{2,3}	200	NBBM-V460-A300	2.3	P14494-101	2.5	9000	NBBM-V460-A300	2.3	ABB-48431-305	2.5	16000
302A-5 ^{2,3}	250	NBBM-V460-A300	2.3	P14494-113	2.3	11270	NBBM-V460-A300	2.3	P14494-116	2.3	23000
361A-5 ^{2,3}	300	NBBM-V460-A300	2.3	P14494-114	2.3	14720	NBBM-V460-A300	2.3	P14494-117	2.3	33120
414A-5 ^{2,3}	350	NBBM-V460-A300	2.3	P14494-115	2.3	16600	NBBM-V460-A300	2.3	P14494-117	2.3	33120

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 40 HP and optional above 40 HP.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

ACS880 Drives

Three Phase 440-480V applications, stopping duty only

Standard Enclosed Resistor Packages (continued)

Drive Part No. ACS880-01-	Hp ND	Duty Cycle=30sec on/180sec off					Duty Cycle=60sec on/180sec off				
		Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts	Brake Module	R _{min} ohms	Resistor Part No. ¹	Ohms	Watts
02A1-5	1	Internal	210	P14494-11	250	300	Internal	210	P14494-11	250	300
03A0-5	1.5	Internal	210	P14494-11	250	300	Internal	210	P14494-12	250	600
03A4-5	2	Internal	210	P14494-11	250	300	Internal	210	P14494-12	250	600
04A8-5	3	Internal	210	P14494-12	250	600	Internal	210	P14494-12	250	600
05A2-5	3	Internal	78	P14494-16	150	600	Internal	78	P14494-16	150	600
07A6-5	5	Internal	78	ABB-41313	100	600	Internal	78	P14494-63	80	1050
11A0-5	7.5	Internal	78	P14494-63	80	1050	Internal	78	P14494-22	80	1600
014A-5	10	Internal	39	P14494-26	45	1260	Internal	39	P14494-28	45	2450
021A-5	15	Internal	39	ABB-44534	40	2010	Internal	39	ABB-43167	40	2890
027A-5	20	Internal	19	ABB-48431-007	22	2426	Internal	19	P14494-45	21	4400
034A-5	25	Internal	19	P14494-106	19	3200	Internal	19	P14494-107	19	5000
040A-5	30	Internal	13	P14494-53	15	3600	Internal	13	P14494-55	15	6000
052A-5	40	Internal	13	P14494-108	13	5200	Internal	13	ABB-48431-037	13	8125
065A-5 ^{2,3}	50	NBBM-V460-A30	8	ABB-48431-120	8	6272	NBBM-V460-A30	8	ABB-44540	8.32	10834
077A-5 ^{2,3}	60	NBBM-V460-A30	8	ABB-48431-121	8	7200	NBBM-V460-A30	8	ABB-44541	8.42	12590
096A-5 ^{2,3}	75	NBBM-V460-A30	5.4	ABB-44499	6.1	9444	NBBM-V460-A30	5.4	ABB-44522	6.39	16282
124A-5 ^{2,3}	100	NBBM-V460-A30	5.4	P14494-111	5.4	13500	NBBM-V460-A30	5.4	P14494-112	5.4	19500
156A-5 ^{2,3}	125	NBBM-V460-A30	3.3	ABB-48431-210	4	15876	NBBM-V460-A30	3.3	ABB-48431-212	4	25600
180A-5 ^{2,3}	150	NBBM-V460-A150	3.3	ABB-48431-241	3.6	17640	NBBM-V460-A150	3.3	ABB-48431-243	3.6	29160
240A-5 ^{2,3}	200	NBBM-V460-A300	2.3	ABB-48431-306	2.5	25000	NBBM-V460-A300	2.3	ABB-48431-308	2.5	45563
260A-5 ^{2,3}	200	NBBM-V460-A300	2.3	ABB-48431-306	2.5	25000	NBBM-V460-A300	2.3	ABB-48431-308	2.5	45563
302A-5 ^{2,3}	250	NBBM-V460-A300	2.3	P14494-117	2.3	33120	NBBM-V460-A300	2.3	P14494-119	2.3	51750
361A-5 ^{2,3}	300	NBBM-V460-A300	2.3	P14494-118	2.3	45080	NBBM-V460-A300	2.3	P14494-120	2.3	74500
414A-5 ^{2,3}	350	NBBM-V460-A300	2.3	P14494-118	2.3	45080	NBBM-V460-A300	2.3	P14494-120	2.3	74500

NOTES:

1. To determine resistor type, dimensions and weights refer to Resistor Technical Data Tables.
2. The Brake Module is supplied as standard up to 40 HP and optional above 40 HP.
3. If the +D150 Brake Module was not specified at time of order then purchase the external brake module noted above.

Resistor Technical Data

By Part Number

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
ABB-41130	18	300	GCE1	12W x 5D x 5H	7
ABB-41131	15	600	GCE2	12W x 7D x 5H	10
ABB-41132	10	600	GCE2	12W x 7D x 5H	10
ABB-41133	8	900	GCE3	12W x 10D x 5H	13
ABB-41134	6	800	GCE2	12W x 7D x 5H	10
ABB-41135	5	1200	GCE3	12W x 10D x 5H	13
ABB-41136	3	1500	GCE4	12W x 13D x 5H	16
ABB-41137	3	1800	GCE6	19W x 10D x 5H	16
ABB-41138	3	2100	GCE6	19W x 10D x 5H	16
ABB-41139	44	300	GCE1	12W x 5D x 5H	7
ABB-41140	38	600	GCE2	12W x 7D x 5H	10
ABB-41141	28	600	GCE2	12W x 7D x 5H	10
ABB-41142	23	600	GCE2	12W x 7D x 5H	10
ABB-41143	12	900	GCE3	12W x 10D x 5H	13
ABB-41144	13	1200	GCE3	12W x 10D x 5H	13
ABB-41145	9	1500	GCE4	12W x 13D x 5H	16
ABB-41146	8	2100	GCE6	19W x 10D x 5H	17
ABB-41147	6	2400	GCE6	19W x 10D x 5H	17
ABB-41148	6	3000	GCE6	19W x 10D x 5H	19
ABB-41149	4	3600	GCE6	19W x 10D x 5H	20
ABB-41150	4	5600	GCE9	26.5W x 10D x 5H	26
ABB-41151	55	600	GCE2	12W x 7D x 5H	10
ABB-41152	45	600	GCE2	12W x 7D x 5H	10
ABB-41153	35	600	GCE2	12W x 7D x 5H	10
ABB-41154	22	900	GCE3	12W x 10D x 5H	13
ABB-41155	22	1200	GCE3	12W x 10D x 5H	13
ABB-41156	13	1500	GCE4	12W x 13D x 5H	16
ABB-41157	13	2100	GCE6	19W x 10D x 5H	18
ABB-41158	8	2400	GCE6	19W x 10D x 5H	18
ABB-41159	8	3000	GCE6	19W x 10D x 5H	19
ABB-41160	6	3800	GCE6	19W x 10D x 5H	19
ABB-41161	6	4600	GCE9	26.5W x 10D x 5H	24
ABB-41162	6	5200	GCE9	26.5W x 10D x 5H	24
ABB-41163	35	900	GCE3	12W x 10D x 5H	13
ABB-41165	20	1800	GCE5	12W x 16D x 5H	18
ABB-41167	15	2100	GCE6	19W x 10D x 5H	20
ABB-41168	11	2400	GCE6	19W x 10D x 5H	17
ABB-41169	11	3700	GCE6	19W x 10D x 5H	19
ABB-41170	8	4600	GCE9	26.5W x 10D x 5H	24
ABB-41304	100	300	GCE1	12W x 5D x 5H	7
ABB-41306	50	300	GCE1	12W x 5D x 5H	7
ABB-41309	400	600	GCE2	12W x 7D x 5H	10
ABB-41311	200	600	GCE2	12W x 7D x 5H	10
ABB-41313	100	600	GCE2	12W x 7D x 5H	10
ABB-42669	23.1	2000	GCE5	12W x 16D x 5H	18
ABB-42672	13.65	2000	GCE5	12W x 16D x 5H	18
ABB-42673	8.06	4500	GCE9	26.5W x 10D x 5H	24
ABB-42676	6.59	6000	GCE12	26.5W x 13D x 5H	30
ABB-42684	2.27	18000	GCE30	28W x 16D x 10H	74
ABB-42685	1.72	21000	ED2	30W x 18D x 16H	89
ABB-42765	42	1200	GCE3	12W x 10D x 5H	13
ABB-42776	4.4	9000	GCE15	26.5W x 16D x 5H	41
ABB-42778	2.74	13500	GCE18	28W x 10D x 10H	65
ABB-42780	2.74	13500	GCE18	28W x 10D x 10H	65
ABB-42784	1.39	27000	ED2	30W x 18D x 16H	122
ABB-42785	1.25	30000	ED3	30W x 18D x 24H	134
ABB-43153	42	2310	GCE6	19W x 10D x 5H	20
ABB-43154	42	2890	GCE8	19W x 13D x 5H	24

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
ABB-43155	42	3842	GCE10	19W x 16D x 5H	30
ABB-43156	24	7942	GCE15	26.5W x 16D x 5H	32
ABB-43158	13.04	17797	GCE30	28W x 16D x 10H	67
ABB-43159	13.04	21853	ED2	30W x 18D x 16H	94
ABB-43160	8.52	25992	ED2	30W x 18D x 16H	100
ABB-43161	8.52	28800	ED3	30W x 18D x 24H	147
ABB-43164	4	30976	ED3	30W x 18D x 24H	133
ABB-43165	4.07	32400	ED3	30W x 18D x 24H	133
ABB-43166	2.76	34476	ED3	30W x 18D x 24H	129
ABB-43167	40	2890	GCE8	19W x 13D x 5H	24
ABB-43168	40	3842	GCE10	19W x 16D x 5H	30
ABB-43168	40	3842	GCE10	19W x 16D x 5H	30
ABB-43169	42	4410	GCE12	26.5W x 13D x 5H	32
ABB-43170	24	10648	GCE18	28W x 10D x 10H	38
ABB-43171	24	13750	GCE24	28W x 13D x 10H	44
ABB-43174	8	25992	ED3	30W x 18D x 24H	142
ABB-43175	8	29768	ED3	30W x 18D x 24H	142
ABB-43177	6.59	31104	ED3	30W x 18D x 24H	158
ABB-43179	4.4	33124	ED3	30W x 18D x 24H	174
ABB-43390	40	800	GCE2	12W x 7D x 5H	10
ABB-43492	4.4	32400	ED3	30W x 18D x 24H	174
ABB-43493	2.74	34476	ED3	30W x 18D x 24H	129
ABB-43494	2.74	49208	ED4	30W x 18D x 32H	188
ABB-43495	2.27	51200	ED5	30W x 18D x 40H	233
ABB-43496	1.72	58183	ED5	30W x 18D x 40H	256
ABB-43497	1.39	70178	ED4	30W x 18D x 32H	256
ABB-43498	1.25	88781	ED7	30W x 18D x 56H	426
ABB-43502	2.74	60750	ED4	30W x 18D x 32H	188
ABB-43503	2.27	68450	ED6	30W x 18D x 48H	311
ABB-43504	1.72	82280	ED5	30W x 18D x 40H	318
ABB-43505	1.39	99878	ED7	30W x 18D x 56H	442
ABB-44468	40	661	GCE2	12W x 7D x 5H	10
ABB-44469	40	820	GCE2	12W x 7D x 5H	10
ABB-44470	41	1071	GCE3	12W x 10D x 5H	13
ABB-44471	22	1455	GCE4	12W x 13D x 5H	16
ABB-44472	22	1904	GCE5	12W x 16D x 5H	18
ABB-44473	13.5	2509	GCE6	19W x 10D x 5H	19
ABB-44474	13	3558	GCE6	19W x 10D x 5H	19
ABB-44475	8.06	4358	GCE9	26.5W x 10D x 5H	24
ABB-44476	8.06	5119	GCE9	26.5W x 10D x 5H	24
ABB-44477	8.14	6863	GCE15	26.5W x 16D x 5H	35
ABB-44478	6.44	8083	GCE15	26.5W x 16D x 5H	38
ABB-44479	4.26	9872	GCE15	26.5W x 16D x 5H	41
ABB-44480	4.26	11696	GCE18	28W x 10D x 10H	53
ABB-44481	2.7	16968	GCE30	28W x 16D x 10H	71
ABB-44484	2.75	20061	GCE30	28W x 16D x 10H	100
ABB-44485	2.06	24486	ED3	30W x 18D x 24H	113
ABB-44486	1.73	29860	ED3	30W x 18D x 24H	133
ABB-44487	1.41	35644	ED3	30W x 18D x 24H	145
ABB-44488	1.21	46349	ED4	30W x 18D x 32H	243
ABB-44489	40	833	GCE2	12W x 7D x 5H	10
ABB-44490	41	980	GCE3	12W x 10D x 5H	13
ABB-44491	40.5	1358	GCE4	12W x 13D x 5H	16
ABB-44492	23	1771	GCE5	12W x 16D x 5H	18
ABB-44493	22.5	2392	GCE6	19W x 10D x 5H	20
ABB-44494	13	3333	GCE6	19W x 10D x 5H	19
ABB-44495	13	4153	GCE9	26.5W x 10D x 5H	24
ABB-44496	8.06	5592	GCE9	26.5W x 10D x 5H	24

Resistor Technical Data

By Part Number

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
ABB-44497	8.14	6512	GCE15	26.5W x 16D x 5H	35
ABB-44498	8.32	7960	GCE15	26.5W x 16D x 5H	38
ABB-44499	6.1	9444	GCE18	28W x 10D x 10H	47
ABB-44500	6.44	10892	GCE18	28W x 10D x 10H	47
ABB-44501	4.2	15279	GCE24	28W x 13D x 10H	69
ABB-44502	4.2	18553	GCE30	28W x 16D x 10H	93
ABB-44503	4.02	16083	GCE24	28W x 13D x 10H	69
ABB-44504	4.02	19403	GCE30	28W x 16D x 10H	93
ABB-44505	2.76	23430	ED2	30W x 18D x 16H	92
ABB-44506	2.76	28553	ED2	30W x 18D x 16H	137
ABB-44507	2.12	33388	ED3	30W x 18D x 24H	151
ABB-44508	1.72	43916	ED4	30W x 18D x 32H	183
ABB-44509	1.38	52037	ED4	30W x 18D x 32H	255
ABB-44512	40.6	1303	GCE4	12W x 13D x 5H	16
ABB-44513	40.4	1624	GCE4	12W x 13D x 5H	16
ABB-44514	40.6	2163	GCE6	19W x 10D x 5H	20
ABB-44515	22	2910	GCE8	19W x 13D x 5H	25
ABB-44516	22.75	3683	GCE9	26.5W x 10D x 5H	23
ABB-44517	13.3	5093	GCE9	26.5W x 10D x 5H	23
ABB-44518	13.3	6955	GCE12	26.5W x 13D x 5H	27
ABB-44519	8.32	8444	GCE15	26.5W x 16D x 5H	38
ABB-44520	8.32	9920	GCE18	28W x 10D x 10H	45
ABB-44521	8.24	13559	GCE24	28W x 13D x 10H	59
ABB-44522	6.39	16282	GCE30	28W x 16D x 10H	76
ABB-44523	4.2	20026	GCE30	28W x 16D x 10H	93
ABB-44524	4	24916	ED3	30W x 18D x 24H	122
ABB-44525	2.71	33760	ED3	30W x 18D x 24H	129
ABB-44528	2.7	40835	ED4	30W x 18D x 32H	184
ABB-44529	2.02	49941	ED4	30W x 18D x 32H	206
ABB-44530	1.73	58719	ED5	30W x 18D x 40H	256
ABB-44531	1.38	73045	ED7	30W x 18D x 56H	353
ABB-44532	1.2	93316	ED8	30W x 18D x 64H	513
ABB-44533	40.4	1650	GCE4	12W x 13D x 5H	16
ABB-44534	40	2010	GCE5	12W x 16D x 5H	18
ABB-44535	40	2751	GCE8	19W x 13D x 5H	24
ABB-44536	22	3703	GCE9	26.5W x 10D x 5H	23
ABB-44537	22.32	4823	GCE9	26.5W x 10D x 5H	23
ABB-44538	13.18	6574	GCE12	26.5W x 13D x 5H	27
ABB-44539	13.18	8192	GCE15	26.5W x 16D x 5H	33
ABB-44540	8.32	10834	GCE18	28W x 10D x 10H	45
ABB-44541	8.42	12590	GCE18	28W x 10D x 10H	45
ABB-44542	8.52	15547	GCE24	28W x 13D x 10H	59
ABB-44543	6.39	18031	GCE30	28W x 16D x 10H	76
ABB-44544	6.39	21955	GCE30	28W x 16D x 10H	58
ABB-44545	4.1	31477	ED3	30W x 18D x 24H	164
ABB-44546	4.2	37106	ED4	30W x 18D x 32H	156
ABB-44549	2.88	44907	ED4	30W x 18D x 32H	193
ABB-44550	2.77	56900	ED4	30W x 18D x 32H	188
ABB-44551	2.02	70350	ED5	30W x 18D x 40H	282
ABB-44552	1.84	81866	ED6	30W x 18D x 48H	349
ABB-44553	1.38	104527	ED9	30W x 18D x 72H	580
ABB-48431-001	22	285	GCE1	12W x 5D x 5H	7
ABB-48431-002	22	819	GCE2	12W x 7D x 5H	10
ABB-48431-003	22	1140	GCE3	12W x 10D x 5H	13
ABB-48431-004	22	1408	GCE4	12W x 13D x 5H	16
ABB-48431-005	22	1862	GCE5	12W x 16D x 5H	18
ABB-48431-006	22	2200	GCE6	19W x 10D x 5H	20
ABB-48431-007	22	2426	GCE6	19W x 10D x 5H	20

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
ABB-48431-008	22	3168	GCE8	19W x 13D x 5H	25
ABB-48431-009	22	5632	GCE9	26.5W x 10D x 5H	23
ABB-48431-011	22	8800	GCE15	26.5W x 16D x 5H	32
ABB-48431-012	22	17248	ED2	30W x 18D x 16H	80
ABB-48431-013	22	19800	ED2	30W x 18D x 16H	80
ABB-48431-020	44	324	GCE1	12W x 5D x 5H	7
ABB-48431-021	44	800	GCE2	12W x 7D x 5H	10
ABB-48431-022	44	1263	GCE3	12W x 10D x 5H	13
ABB-48431-023	44	3294	GCE8	19W x 13D x 5H	25
ABB-48431-030	13	1433	GCE4	12W x 13D x 5H	16
ABB-48431-031	13	1872	GCE5	12W x 16D x 5H	18
ABB-48431-032	13	2197	GCE6	19W x 10D x 5H	18
ABB-48431-033	13	3328	GCE6	19W x 10D x 5H	18
ABB-48431-035	13	4212	GCE9	26.5W x 10D x 5H	24
ABB-48431-036	13	6292	GCE12	26.5W x 13D x 5H	27
ABB-48431-037	13	8125	GCE15	26.5W x 16D x 5H	33
ABB-48431-038	13	11700	GCE24	28W x 13D x 10H	49
ABB-48431-039	13	18772	GCE30	28W x 16D x 10H	67
ABB-48431-040	13	25168	ED3	30W x 18D x 24H	120
ABB-48431-042	13	32500	ED3	30W x 18D x 24H	145
ABB-48431-043	13	51597	ED4	30W x 18D x 32H	210
ABB-48431-044	13	20800	ED2	30W x 18D x 16H	94
ABB-48431-050	80	400	GCE1	12W x 5D x 5H	7
ABB-48431-051	80	400	GCE1	12W x 5D x 5H	7
ABB-48431-052	80	800	GCE2	12W x 7D x 5H	10
ABB-48431-053	80	1600	GCE4	12W x 13D x 5H	16
ABB-48431-054	44	2200	GCE6	19W x 10D x 5H	20
ABB-48431-055	55	800	GCE2	12W x 7D x 5H	10
ABB-48431-056	55	1200	GCE3	12W x 10D x 5H	13
ABB-48431-057	55	2000	GCE5	12W x 16D x 5H	18
ABB-48431-058	55	3000	GCE8	19W x 13D x 5H	25
ABB-48431-060	11	409	GCE1	12W x 5D x 5H	7
ABB-48431-061	11	704	GCE2	12W x 7D x 5H	10
ABB-48431-062	11	931	GCE3	12W x 10D x 5H	13
ABB-48431-063	11	1213	GCE3	12W x 10D x 5H	13
ABB-48431-064	11	1584	GCE4	12W x 13D x 5H	16
ABB-48431-065	11	1859	GCE5	12W x 16D x 5H	18
ABB-48431-066	11	2475	GCE6	19W x 10D x 5H	17
ABB-48431-067	11	3564	GCE6	19W x 10D x 5H	19
ABB-48431-068	11	4400	GCE9	26.5W x 10D x 5H	24
ABB-48431-069	11	6875	GCE12	26.5W x 13D x 5H	28
ABB-48431-070	11	8019	GCE12	26.5W x 13D x 5H	28
ABB-48431-071	11	9900	GCE18	28W x 10D x 10H	42
ABB-48431-072	11	15884	GCE24	28W x 13D x 10H	56
ABB-48431-073	11	21296	ED2	30W x 18D x 16H	95
ABB-48431-080	30	800	GCE2	12W x 7D x 5H	10
ABB-48431-081	30	1600	GCE4	12W x 13D x 5H	16
ABB-48431-090	8.5	417	GCE1	12W x 5D x 5H	7
ABB-48431-091	8.5	719	GCE2	12W x 7D x 5H	10
ABB-48431-092	8.5	937	GCE3	12W x 10D x 5H	13
ABB-48431-093	8.5	1224	GCE3	12W x 10D x 5H	13
ABB-48431-094	8.5	1437	GCE4	12W x 13D x 5H	16
ABB-48431-095	8.5	1913	GCE5	12W x 16D x 5H	18
ABB-48431-096	8.5	2754	GCE6	19W x 10D x 5H	19
ABB-48431-097	8.5	5313	GCE12	26.5W x 13D x 5H	29
ABB-48431-098	8.5	6197	GCE12	26.5W x 13D x 5H	29
ABB-48431-099	8.5	7650	GCE15	26.5W x 16D x 5H	35
ABB-48431-100	8.5	12274	GCE24	28W x 13D x 10H	53

Resistor Technical Data

By Part Number

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
ABB-48431-101	8.5	16456	GCE30	28W x 16D x 10H	70
ABB-48431-102	8.5	21250	ED2	30W x 18D x 16H	100
ABB-48431-110	120	600	GCE2	12W x 7D x 5H	10
ABB-48431-120	8	6272	GCE15	26.5W x 16D x 5H	35
ABB-48431-121	8	7200	GCE15	26.5W x 16D x 5H	35
ABB-48431-122	8	11552	GCE18	28W x 10D x 10H	45
ABB-48431-123	8	15488	GCE30	28W x 16D x 10H	70
ABB-48431-125	8	20000	ED2	30W x 18D x 16H	100
ABB-48431-126	8	31752	ED3	30W x 18D x 24H	142
ABB-48431-128	8	39200	ED3	30W x 18D x 24H	179
ABB-48431-129	8	51200	ED5	30W x 18D x 40H	170
ABB-48431-140	63	1200	GCE3	12W x 10D x 5H	13
ABB-48431-141	63	3000	GCE8	19W x 13D x 5H	25
ABB-48431-142	63	4000	GCE10	19W x 16D x 5H	30
ABB-48431-143	63	5000	GCE12	26.5W x 13D x 5H	34
ABB-48431-144	63	6000	GCE15	26.5W x 16D x 5H	40
ABB-48431-145	63	7000	GCE18	28W x 10D x 10H	47
ABB-48431-150	5.3	339	GCE1	12W x 5D x 5H	7
ABB-48431-151	5.3	584	GCE2	12W x 7D x 5H	10
ABB-48431-152	5.3	896	GCE3	12W x 10D x 5H	13
ABB-48431-153	5.3	1193	GCE3	12W x 10D x 5H	13
ABB-48431-154	5.3	1717	GCE5	12W x 16D x 5H	18
ABB-48431-155	5.3	2565	GCE6	19W x 10D x 5H	18
ABB-48431-156	5.3	3313	GCE6	19W x 10D x 5H	19
ABB-48431-158	5.3	3864	GCE6	19W x 10D x 5H	19
ABB-48431-159	5.3	4770	GCE9	26.5W x 10D x 5H	25
ABB-48431-160	5.3	5772	GCE12	26.5W x 13D x 5H	32
ABB-48431-161	5.3	7653	GCE12	26.5W x 13D x 5H	32
ABB-48431-162	5.3	13250	GCE24	28W x 13D x 10H	67
ABB-48431-163	5.3	21036	GCE30	28W x 16D x 10H	84
ABB-48431-164	5.3	25970	ED2	30W x 18D x 16H	122
ABB-48431-165	5.3	29813	ED2	30W x 18D x 16H	122
ABB-48431-166	5.3	33920	ED3	30W x 18D x 24H	113
ABB-48431-167	5.3	42930	ED3	30W x 18D x 24H	194
ABB-48431-180	4.3	2688	GCE6	19W x 10D x 5H	18
ABB-48431-181	4.3	3135	GCE6	19W x 10D x 5H	18
ABB-48431-182	4.3	3870	GCE9	26.5W x 10D x 5H	25
ABB-48431-183	4.3	6209	GCE12	26.5W x 13D x 5H	32
ABB-48431-184	4.3	10750	GCE18	28W x 10D x 10H	53
ABB-48431-185	4.3	17067	GCE24	28W x 13D x 10H	74
ABB-48431-186	4.3	21070	GCE30	28W x 16D x 10H	93
ABB-48431-187	4.3	27520	ED3	30W x 18D x 24H	101
ABB-48431-188	4.3	34830	ED3	30W x 18D x 24H	169
ABB-48431-189	4.3	43000	ED3	30W x 18D x 24H	205
ABB-48431-210	4	15876	GCE24	28W x 13D x 10H	69
ABB-48431-211	4	22500	GCE30	28W x 16D x 10H	93
ABB-48431-212	4	25600	ED3	30W x 18D x 24H	101
ABB-48431-213	4	32400	ED3	30W x 18D x 24H	164
ABB-48431-214	4	40000	ED3	30W x 18D x 24H	199
ABB-48431-215	4	48400	ED5	30W x 18D x 40H	194
ABB-48431-240	3.6	6970	GCE12	26.5W x 13D x 5H	35
ABB-48431-241	3.6	17640	GCE24	28W x 13D x 10H	82
ABB-48431-242	3.6	20250	GCE24	28W x 13D x 10H	82
ABB-48431-243	3.6	29160	ED2	30W x 18D x 16H	132
ABB-48431-244	3.6	36000	ED3	30W x 18D x 24H	182
ABB-48431-245	3.6	43560	ED4	30W x 18D x 32H	170
ABB-48431-270	2.9	5614	GCE9	26.5W x 10D x 5H	29
ABB-48431-271	2.9	14210	GCE18	28W x 10D x 10H	65

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
ABB-48431-272	2.9	16313	GCE18	28W x 10D x 10H	65
ABB-48431-273	2.9	23490	GCE30	28W x 16D x 10H	100
ABB-48431-274	2.9	29000	ED2	30W x 18D x 16H	143
ABB-48431-275	2.9	41760	ED4	30W x 18D x 32H	193
ABB-48431-276	2.9	52853	ED4	30W x 18D x 32H	246
ABB-48431-300	2.5	2250	GCE6	19W x 10D x 5H	18
ABB-48431-301	2.5	2723	GCE6	19W x 10D x 5H	19
ABB-48431-303	2.5	3610	GCE6	19W x 10D x 5H	21
ABB-48431-304	2.5	6250	GCE12	26.5W x 13D x 5H	37
ABB-48431-305	2.5	16000	GCE30	28W x 16D x 10H	71
ABB-48431-306	2.5	25000	ED2	30W x 18D x 16H	132
ABB-48431-307	2.5	36000	ED3	30W x 18D x 24H	160
ABB-48431-308	2.5	45563	ED4	30W x 18D x 32H	225
ABB-48431-330	2.2	14080	GCE30	28W x 16D x 10H	71
ABB-48431-331	2.2	17820	GCE24	28W x 13D x 10H	82
ABB-48431-332	2.2	26620	ED3	30W x 18D x 24H	113
ABB-48431-333	2.2	31680	ED3	30W x 18D x 24H	151
ABB-48431-334	2.2	40095	ED4	30W x 18D x 32H	205
ABB-48431-335	2.2	49500	ED5	30W x 18D x 40H	229
ABB-48431-360	1.8	14580	GCE24	28W x 13D x 10H	76
ABB-48431-361	1.8	25920	ED2	30W x 18D x 16H	118
ABB-48431-362	1.8	32805	ED3	30W x 18D x 24H	169
ABB-48431-363	1.8	40500	ED4	30W x 18D x 32H	191
ABB-48431-364	1.8	49005	ED4	30W x 18D x 32H	256
ABB-48431-365	1.8	61605	ED5	30W x 18D x 40H	256
ABB-48431-366	1.8	72000	ED6	30W x 18D x 48H	355
ABB-48431-390	1.7	8330	GCE12	26.5W x 13D x 5H	45
ABB-48431-391	1.7	10880	GCE24	28W x 13D x 10H	59
ABB-48431-392	1.7	17000	GCE24	28W x 13D x 10H	89
ABB-48431-393	1.7	24480	ED2	30W x 18D x 16H	114
ABB-48431-394	1.7	30983	ED3	30W x 18D x 24H	158
ABB-48431-395	1.7	46283	ED4	30W x 18D x 32H	256
ABB-48431-396	1.7	58183	ED4	30W x 18D x 32H	227
ABB-48431-420	1.5	18150	GCE30	28W x 16D x 10H	90
ABB-48431-421	1.5	21600	ED2	30W x 18D x 16H	105
ABB-48431-422	1.5	27338	ED2	30W x 18D x 16H	132
ABB-48431-423	1.5	40838	ED4	30W x 18D x 32H	236
ABB-48431-424	1.5	51338	ED4	30W x 18D x 32H	210
ABB-48431-425	1.5	60000	ED5	30W x 18D x 40H	294
ABB-48431-426	1.5	75938	ED5	30W x 18D x 40H	303
ABB-48431-450	1.35	24604	ED2	30W x 18D x 16H	122
ABB-48431-451	1.35	30375	ED3	30W x 18D x 24H	145
ABB-48431-452	1.35	36754	ED4	30W x 18D x 32H	215
ABB-48431-453	1.35	46204	ED4	30W x 18D x 32H	201
ABB-48431-454	1.35	54000	ED4	30W x 18D x 32H	255
ABB-48431-455	1.35	68344	ED4	30W x 18D x 32H	256
ABB-48431-456	1.35	91260	ED7	30W x 18D x 56H	442
ABB-48431-457	1.35	121500	ED8	30W x 18D x 64H	547
ABB-48431-480	1.2	32670	ED3	30W x 18D x 24H	179
ABB-48431-481	1.2	41070	ED3	30W x 18D x 24H	173
ABB-48431-482	1.2	60750	ED4	30W x 18D x 32H	241
ABB-48431-483	1.2	60750	ED4	30W x 18D x 32H	241
ABB-48431-484	1.2	81120	ED6	30W x 18D x 48H	380
ABB-48431-485	1.2	108000	ED8	30W x 18D x 64H	513
ABB-48431-510	1	12100	GCE30	28W x 16D x 10H	78
ABB-48431-511	1	14400	GCE24	28W x 13D x 10H	72
ABB-48431-512	1	27225	ED3	30W x 18D x 24H	158
ABB-48431-514	1	34200	ED3	30W x 18D x 24H	147

Resistor Technical Data

By Part Number

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
ABB-48431-515	1	40000	ED3	30W x 18D x 24H	193
ABB-48431-516	1	50625	ED3	30W x 18D x 24H	194
ABB-48431-517	1	67600	ED5	30W x 18D x 40H	318
ABB-48431-518	1	90000	ED6	30W x 18D x 48H	412
ABB-48431-519	1	122500	(2) ED5	(2) 30W x 18D x 40H	605
ABB-48431-540	0.9	16403	GCE24	28W x 13D x 10H	82
ABB-48431-541	0.9	24503	ED2	30W x 18D x 16H	132
ABB-48431-542	0.9	30803	ED3	30W x 18D x 24H	147
ABB-48431-543	0.9	36000	ED3	30W x 18D x 24H	182
ABB-48431-544	0.9	45600	ED3	30W x 18D x 24H	179
ABB-48431-545	0.9	60840	ED5	30W x 18D x 40H	303
ABB-48431-546	0.9	81000	ED6	30W x 18D x 48H	395
ABB-48431-570	0.6	24000	GCE30	28W x 16D x 10H	109
ABB-48431-571	0.6	30375	ED2	30W x 18D x 16H	132
ABB-48431-572	0.6	54000	ED4	30W x 18D x 32H	261
ABB-48431-573	0.6	73500	ED6	30W x 18D x 48H	349
ABB-48431-574	0.6	96000	ED7	30W x 18D x 56H	440
ABB-48431-575	0.6	121500	(2) ED5	(2) 30W x 18D x 40H	509
ABB-49173-001	6.8	1000	GCE3	12W x 10D x 5H	13
ABB-49173-002	6.8	2600	GCE6	19W x 10D x 5H	17
ABB-49173-003	6.8	4500	GCE9	26.5W x 10D x 5H	24
ABB-49173-004	3.5	2250	GCE6	19W x 10D x 5H	17
ABB-49173-005	3.5	8500	GCE15	26.5W x 16D x 5H	45
ABB-49173-006	2	3600	GCE6	19W x 10D x 5H	23
ABB-49173-007	2	8600	GCE15	26.5W x 16D x 5H	52
ABB-49173-008	1.4	6800	GCE9	26.5W x 10D x 5H	36
ABB-49173-009	1.4	13000	GCE18	28W x 10D x 10H	70
ABB-49173-010	1.4	21000	GCE30	28W x 16D x 10H	90
ABB-49173-011	1	6500	GCE12	26.5W x 13D x 5H	45
ABB-49173-012	0.68	13500	GCE18	28W x 10D x 10H	65
ABB-49173-013	0.68	26000	ED2	30W x 18D x 16H	132
ABB-49173-014	0.68	42000	ED4	30W x 18D x 32H	241
P14494-10	350	200	GCE1	12W x 5D x 5H	8
P14494-11	250	300	GCE1	12W x 5D x 5H	7
P14494-12	250	600	GCE2	12W x 7D x 5H	10
P14494-13	200	300	GCE1	12W x 5D x 5H	7
P14494-14	200	600	GCE2	12W x 7D x 5H	10
P14494-15	150	300	GCE1	12W x 5D x 5H	7
P14494-16	150	600	GCE2	12W x 7D x 5H	10
P14494-17	150	900	GCE3	12W x 10D x 5H	13
P14494-18	150	1200	GCE4	12W x 13D x 5H	16
P14494-19	75	300	GCE1	12W x 5D x 5H	7
P14494-20	75	600	GCE2	12W x 7D x 5H	10
P14494-21	75	1000	GCE3	12W x 10D x 5H	13
P14494-22	80	1600	GCE4	12W x 13D x 5H	16
P14494-23	80	2400	GCE6	19W x 10D x 5H	20
P14494-24	45	300	GCE1	12W x 5D x 5H	7
P14494-25	45	800	GCE2	12W x 7D x 5H	10
P14494-26	45	1260	GCE3	12W x 10D x 5H	13
P14494-27	45	1920	GCE5	12W x 16D x 5H	18
P14494-28	45	2450	GCE8	19W x 13D x 5H	24
P14494-29	45	3200	GCE8	19W x 13D x 5H	25
P14494-30	45	4400	GCE12	26.5W x 13D x 5H	32
P14494-31	35	300	GCE1	12W x 5D x 5H	7
P14494-32	35	820	GCE2	12W x 7D x 5H	10
P14494-33	35	1200	GCE3	12W x 10D x 5H	13
P14494-34	35	1600	GCE4	12W x 13D x 5H	16
P14494-35	35	2500	GCE8	19W x 13D x 5H	24
P14494-36	35	3600	GCE9	26.5W x 10D x 5H	28

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
P14494-37	35	6200	GCE15	26.5W x 16D x 5H	32
P14494-38	35	1865	GCE5	12W x 16D x 5H	18
P14494-39	21	400	GCE1	12W x 5D x 5H	7
P14494-40	21	750	GCE2	12W x 7D x 5H	10
P14494-41	21	1050	GCE3	12W x 10D x 5H	13
P14494-42	21	1500	GCE4	12W x 13D x 5H	16
P14494-43	21	2000	GCE5	12W x 16D x 5H	18
P14494-44	21	2600	GCE8	19W x 13D x 5H	24
P14494-45	21	4400	GCE9	26.5W x 10D x 5H	23
P14494-46	15	750	GCE2	12W x 7D x 5H	10
P14494-47	15	1150	GCE3	12W x 10D x 5H	13
P14494-48	15	1550	GCE4	12W x 13D x 5H	16
P14494-49	15	2160	GCE6	19W x 10D x 5H	20
P14494-50	15	2450	GCE8	19W x 13D x 5H	24
P14494-51	15	2700	GCE8	19W x 13D x 5H	24
P14494-52	15	3150	GCE8	19W x 13D x 5H	25
P14494-53	15	3600	GCE6	19W x 10D x 5H	19
P14494-54	15	5000	GCE9	26.5W x 10D x 5H	23
P14494-55	15	6000	GCE12	26.5W x 13D x 5H	31
P14494-56	10	720	GCE2	12W x 7D x 5H	10
P14494-57	10	1250	GCE3	12W x 10D x 5H	13
P14494-58	10	1800	GCE5	12W x 16D x 5H	18
P14494-59	10	3600	GCE6	19W x 10D x 5H	19
P14494-60	30	1050	GCE3	12W x 10D x 5H	13
P14494-61	120	300	GCE1	12W x 5D x 5H	7
P14494-62	63	800	GCE2	12W x 7D x 5H	10
P14494-63	80	1050	GCE3	12W x 10D x 5H	13
P14494-64	63	1850	GCE5	12W x 16D x 5H	18
P14494-65	63	2100	GCE6	19W x 10D x 5H	20
P14494-66	60	700	GCE2	12W x 7D x 5H	10
P14494-67	60	1200	GCE3	12W x 10D x 5H	13
P14494-68	60	1680	GCE4	12W x 13D x 5H	16
P14494-69	60	2000	GCE5	12W x 16D x 5H	18
P14494-70	60	2300	GCE6	19W x 10D x 5H	20
P14494-71	60	3200	GCE8	19W x 13D x 5H	25
P14494-72	13	700	GCE2	12W x 7D x 5H	10
P14494-73	30	350	GCE1	12W x 5D x 5H	7
P14494-74	1.79	4476	GCE9	26.5W x 10D x 5H	30
P14494-75	3.33	4316	GCE9	26.5W x 10D x 5H	27
P14494-76	3.42	12312	GCE18	28W x 10D x 10H	59
P14494-77	2.88	7200	GCE12	26.5W x 13D x 5H	38
P14494-78	2	9800	GCE15	26.5W x 16D x 5H	52
P14494-79	3.9	7898	GCE15	26.5W x 16D x 5H	41
P14494-80	2.88	10360	GCE15	26.5W x 16D x 5H	55
P14494-81	3.32	23842	ED2	30W x 18D x 16H	132
P14494-82	2.7	13230	GCE24	28W x 13D x 10H	73
P14494-CR-01	500	100	CR100	6W x 1.5D x 0.75H	1
P14494-CR-02	200	100	CR100	6W x 1.5D x 0.75H	1
P14494-CR-03	150	100	CR100	6W x 1.5D x 0.75H	1
P14494-CR-04	100	100	CR100	6W x 1.5D x 0.75H	1
P14494-CR-05	75	100	CR100	6W x 1.5D x 0.75H	1
P14494-CR-06	50	100	CR100	6W x 1.5D x 0.75H	1
P14494-CR-07	500	150	CR150	9W x 1.5D x 0.75H	1
P14494-CR-08	250	150	CR150	9W x 1.5D x 0.75H	1
P14494-CR-09	200	150	CR150	9W x 1.5D x 0.75H	1
P14494-CR-10	150	150	CR150	9W x 1.5D x 0.75H	1
P14494-CR-11	100	150	CR150	9W x 1.5D x 0.75H	1
P14494-CR-12	50	150	CR150	9W x 1.5D x 0.75H	1
P14494-CR-13	250	200	CR200	6W x 3D x 1.5H	2

Resistor Technical Data

By Part Number

Part Number	Ohms	Watts	Enclosure	Dimensions WxDxH (in)	Weight (lb)
P14494-CR-14	200	200	CR200	6W x 3D x 1.5H	2
P14494-CR-15	150	200	CR200	6W x 3D x 1.5H	2
P14494-CR-16	100	200	CR200	6W x 3D x 1.5H	2
P14494-CR-17	75	200	CR200	6W x 3D x 1.5H	2
P14494-CR-18	50	200	CR200	6W x 3D x 1.5H	1
P14494-CR-19	250	300	CR300	9W x 3D x 1.5H	3
P14494-CR-20	200	300	CR300	9W x 3D x 1.5H	3
P14494-CR-21	150	300	CR300	9W x 3D x 1.5H	3
P14494-CR-22	100	300	CR300	9W x 3D x 1.5H	3
P14494-CR-23	75	300	CR300	9W x 3D x 1.5H	3
P14494-CR-24	50	300	CR300	9W x 3D x 1.5H	3
P14494-CR-25	45	300	CR300	9W x 3D x 1.5H	3
P14494-CR-26	40	300	CR300	9W x 3D x 1.5H	3
P14494-CR-27	250	400	CR400	12W x 3D x 1.5H	4
P14494-CR-28	200	400	CR400	12W x 3D x 1.5H	4
P14494-CR-29	150	400	CR400	12W x 3D x 1.5H	4
P14494-CR-30	100	400	CR400	12W x 3D x 1.5H	4
P14494-CR-31	75	400	CR400	12W x 3D x 1.5H	4
P14494-CR-32	50	400	CR400	12W x 3D x 1.5H	4
P14494-CR-33	45	400	CR400	12W x 3D x 1.5H	4
P14494-CR-34	40	400	CR400	12W x 3D x 1.5H	4

Brake Resistor Technical Data

By Part Number

Part Number	Voltage Class	Minimum Ohms	Continuous Amps	Peak Amps	Dimensions WDW (in)	Weight (lb)
NBBM-V230-A30	200-240	1.9	50	200	7W x 5D x 11H	8
NBBM-V460-A30	380-480	3.8	50	200	7W x 5D x 11H	8
NBBM-V600-A30	500-600	4.7	50	200	7W x 5D x 11H	8
NBBM-V230-A80	200-240	1.9	115	200	7W x 5D x 13H	10
NBBM-V460-A80	380-480	3.8	115	200	7W x 5D x 13H	10
NBBM-V600-A80	500-600	4.7	115	200	7W x 5D x 13H	10
NBBM-V230-A300	200-240	1.3	300	450	7.125W x 10D x 20H	32
NBBM-V460-A300	380-480	2.5	300	450	7.125W x 10D x 20H	32
NBBM-V600-A300	500-600	3.1	300	450	7.125W x 10D x 20H	32
NBBM-V230-A600	200-240	0.63	600	900	7.125W x 10D x 20H	35
NBBM-V460-A600	380-480	1.3	600	900	7.125W x 10D x 20H	35
NBBM-V600-A600	500-600	1.6	600	900	7.125W x 10D x 20H	35
NBBM-V230-A900	200-240	0.42	900	1350	10.125W x 10D x 24H	60
NBBM-V460-A900	395-480	0.87	900	1350	10.125W x 10D x 24H	60
NBBM-V600-A900	500-600	1.07	900	1350	10.125W x 10D x 24H	60
NBBM-V230-A1200	200-240	0.32	1200	1800	10.125W x 10D x 24H	65
NBBM-V460-A1200	395-480	0.65	1200	1800	10.125W x 10D x 24H	65
NBBM-V600-A1200	500-600	0.8	1200	1800	10.125W x 10D x 24H	65