



M3575R

Standard Duty

UL Braking Resistor Modules

OVERVOLTAGE SOLUTIONS FOR AC DRIVES

Bonitron's **M3575R** Resistive Braking Modules provide drive protection from overvoltage faults, due to regenerated voltage, by dissipating the excess energy as heat. M3575R Resistive Braking Modules are typically used in applications where infrequent, low duty cycle, or low horsepower regeneration occurs. The standard duty cycle for the Dynamic Braking Modules is 20% or less.

The **M3575R** Modules are easily applied as resistive loads for use with a drive's internal or external braking transistor. Sizes up to 33 horsepower in a single unit are available and may be paralleled for higher requirements. Units have been designed and tested to ensure that cabinet temperatures are less than 85° C. Over-temperature contacts are standard on all Bonitron resistors.



FEATURES

- UL & CUL Certified models
- 6 - 20% Braking Duty: 1-33 hp: 230, 480-575 AC line voltages available
- Standard terminal access covers
- Fan cooled, low temperature cases are wall or cabinet mountable
- Compatible with any variable speed drive braking system

ADVANTAGES

- Quick cool down - lower temperatures address OSHA concerns
- Covered electrical terminals help protect personnel from shock hazard
- Can be installed as retrofit or to an existing cabinet or drive location
- Fits any VFD DC bus electrical configuration
- UL Certification denotes a higher level of quality

BENEFITS

- Rapid Installation saves application down time
- Model Number Selection Table makes selecting a model number simple
- Stock to 2 weeks available
- Covered electrical terminals reduce electrical shock hazard
- No added hardware cost

MODEL NUMBER SELECTION TABLES

230VAC (320VDC Bus) AT 6% DUTY – No FAN

Model Number	Peak hp	Braking Amps (RMS)	Braking Amps (Peak)	Braking Watts (Peak)	Braking Watts (cont.)	Load Ohms	Chassis
M3575R-L1M0	1hp	0.28A	2A	746	22	190	M4
M3575R-L2M0	2hp	0.57A	4A	1492	45	95	M4
M3575R-L3M0	3hp	0.85A	6A	2238	67	63	M4
M3575R-L4M0	4hp	1.13A	8A	2984	90	48	M7
M3575R-L5B0	5hp	1.41A	10A	3730	112	38	B4
M3575R-L6M0	6hp	1.70A	12A	4476	134	32	M7
M3575R-L8B0	8hp	2.12A	15A	5968	179	25	B4
M3575R-L9M0	9hp	2.55A	18A	6714	201	21	M10
M3575R-L11B0	11hp	2.83A	20A	8206	246	19	B7
M3575R-L16B0	16hp	4.38A	31A	11936	358	13	B7
M3575R-L24B0	24hp	6.65A	47A	17904	537	8	B10

230VAC (320VDC Bus) AT 20% DUTY – WITH FAN

Model Number	Peak hp	Braking Amps (RMS)	Braking Amps (Peak)	Braking Watts (Peak)	Braking Watts (cont.)	Load Ohms	Chassis
M3575R-L1MF	1hp	0.52A	2A	746	75	190	M4
M3575R-L2MF	2hp	1.03A	4A	1492	150	95	M4
M3575R-L3MF	3hp	1.55A	6A	2238	224	63	M4
M3575R-L4MF	4hp	2.07A	8A	2984	298	48	M7
M3575R-L5BF	5hp	2.58A	10A	3730	373	38	B4
M3575R-L6MF	6hp	3.10A	12A	4476	448	32	M7
M3575R-L8BF	8hp	3.87A	15A	5968	597	25	B4
M3575R-L9MF	9hp	4.65A	18A	6714	671	21	M10
M3575R-L11BF	11hp	5.16A	20A	8206	821	19	B7
M3575R-L16BF	16hp	8.00A	31A	11936	1194	13	B7
M3575R-L24BF	24hp	12.14A	47A	17904	1790	8	B10

460VAC (640VDC Bus) AT 6% DUTY – No FAN

Model Number	Peak hp	Braking Amps (RMS)	Braking Amps (Peak)	Braking Watts (Peak)	Braking Watts (cont.)	Load Ohms	Chassis
M3575R-H1M0	1hp	0.14A	1A	746	22	780	M4
M3575R-H2M0	2hp	0.28A	2A	1492	45	390	M4
M3575R-H3M0	3hp	0.42A	3A	2238	67	260	M4
M3575R-H4M0	4hp	0.57A	4A	2984	90	195	M7
M3575R-H5B0	5hp	0.71A	5A	3730	112	150	B4
M3575R-H6M0	6hp	0.85A	6A	4476	134	130	M7
M3575R-H8B0	8hp	1.13A	8A	5968	179	90	B4
M3575R-H9M0	9hp	1.27A	9A	6714	201	87	M10
M3575R-H11B0	11hp	1.84A	13A	8206	246	60	B7
M3575R-H16B0	16hp	2.40A	17A	11936	358	45	B7
M3575R-H24B0	24hp	3.54A	25A	17904	537	30	B10
M3575R-H27B0	28hp	3.82A	27A	20888	627	28.2	B10
M3575R-H33B0	33hp	4.53A	32A	24618	739	22.5	B10D

460VAC (640VDC Bus) AT 20% DUTY – WITH FAN

Model Number	Peak hp	Braking Amps (RMS)	Braking Amps (Peak)	Braking Watts (Peak)	Braking Watts (cont.)	Load Ohms	Chassis
M3575R-H1MF	1hp	0.26A	1A	746	75	780	M4
M3575R-H2MF	2hp	0.52A	2A	1492	150	390	M4
M3575R-H3MF	3hp	0.77A	3A	2238	224	260	M4
M3575R-H4MF	4hp	1.03A	4A	2984	298	195	M7
M3575R-H5BF	5hp	1.29A	5A	3730	373	150	B4
M3575R-H6MF	6hp	1.55A	6A	4476	448	130	M7
M3575R-H8BF	8hp	2.07A	8A	5968	597	90	B4
M3575R-H9MF	9hp	2.32A	9A	6714	671	87	M10
M3575R-H11BF	11hp	3.36A	13A	8206	821	60	B7
M3575R-H16BF	16hp	4.39A	17A	11936	1194	45	B7
M3575R-H24BF	24hp	6.54A	25A	17904	1790	30	B10
M3575R-H27BF	28hp	6.97A	27A	20888	2089	28.2	B10
M3575R-H33BF	33hp	8.26A	32A	24618	2462	22.5	B10D
M3575R-H50G1F	50hp	13.68A	53A	40000	8000	14	G1
M3575R-H100G2F	100hp	27.37A	106A	80000	16000	7	G2
M3575R-H150G3F	150hp	41.05A	159A	120000	24000	5	G3

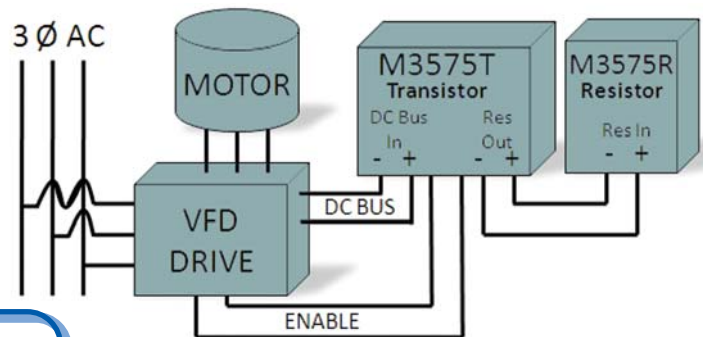
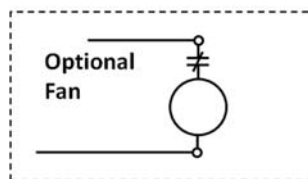
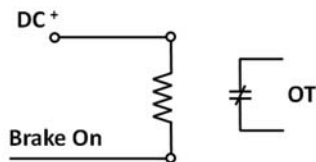
INDUSTRY APPLICATIONS

Automotive.....Pick and Place
Paint Booths
Assembly Lines
Glass Handling
Downhill Conveyers
Elevators.....Industrial Elevators
Cranes.....Shipyard Cranes
Industrial Hoists
Food Processing...Food Byproduct Separating
Pharmaceutical...Centrifuges
Railroad.....Rail Dumping Cars
Testing.....Dynamometers
Fibers.....Web Presses
Printing.....Paper Roller
Tension Controllers

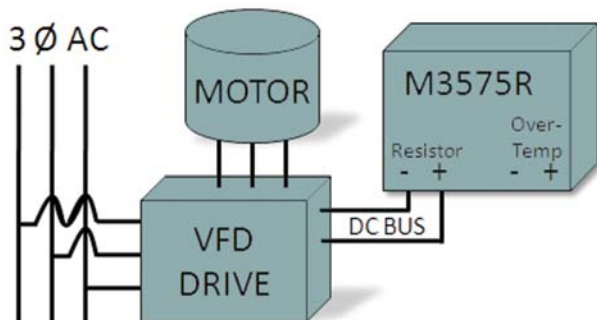
SPECIFICATIONS

Voltages.....230, 460 VAC
Connections.....Braking Transistor
Fault Contact
Optional Fan 115, 230
Input Package.....VAC & 24 VDC
Duty Cycle.....TYPE-1
20% Max with Fan
6% Max without Fan
Maximum 'On-Time'.....60 Seconds
Faults Output.....N.C. Over-Temp
Contact (71°C)
1 A, 24 VDC, 0.5 A,
125 VAC

M3575R SCHEMATIC & DIMENSIONS



VFD WITH EXTERNAL BRAKING TRANSISTOR



VFD WITH INTERNAL BRAKING TRANSISTOR

Chassis	Description	Dimensions (H x W x D)
B4	TYPE - 1	17.75 x 4 x 8"
B7	TYPE - 1	17.75 x 7 x 8"
B10	TYPE - 1	17.75 x 10 x 8"
B10D	TYPE - 1	17.75 x 10 x 11.70"
G1	Grid Resistors (50hp or higher)	38 x 25 x 22"
G2	Grid Resistors (50hp or higher)	47 x 25 x 22"
G3	Grid Resistors (50hp or higher)	56 x 25 x 22"
M4	Mini	12.75 x 4 x 8.70"
M7	Mini	12.75 x 7 x 8.70"
M10	Mini	12.75 x 10 x 8.70"