

DC Accessories Three-Phase Line Reactors

These reactors are intended for use with the 590 Series three-phase controllers. They may be used when voltage transformation or supply isolation is not required. Line reactors:

- Reduce the level of voltage notching on the supply
- Limit total radiated RF interference
- Reduce current spikes in the supply lines during commutation of the SCR bridge.

Dimensions

Amps	Height (H)	Width (W)	Depth (D)	Weight
35	4.5 (114)	6.1 (155)	4.75 (121)	8 (3.6)
70	5.5 (140)	6.1 (155)	4.75 (121)	11 (5.0)
110	5.5 (140)	6.1 (155)	4.75 (121)	15 (6.8)
180	13.0 (330)	7.5 (191)	6.25 (159)	27 (12.3)
250	15.0 (380)	11.0 (280)	10.0 (255)	
360	15.0 (380)	11.0 (280)	10.0 (255)	
550	15.7 (398)	14.5 (366)	12.0 (306)	
720	15.7 (398)	14.5 (366)	12.0 (306)	

All dimensions are in inches (mm) and weights are in Lb. (Kg).

Three-Phase Line Reactors for EMC

These reactors are used with EMC filters (see page 26) for DC controllers that must meet CE standards.

Armature DC Contactor Option

For use with 590+ frames 1 and 2, this assembly provides a 3-pole DC loop contactor (includes dynamic braking contact) that isolates the motor from the drive. Dynamic Braking requires an additional braking resistor kit.

Note: Do not order with Dynamic Braking Contact Option, contact included in assembly.

COMPACT DESIGN

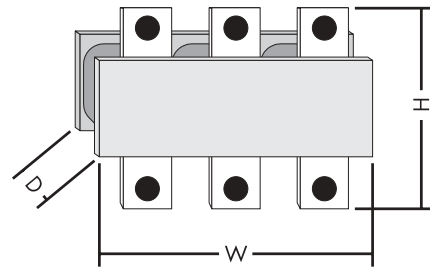
UL AND CSA APPROVALS THROUGH 110A

RATING FOR 230 AND 480 VAC SUPPLIES

TAB TERMINAL CONNECTIONS

Horsepower

230VAC	460VAC	DC Amps	Description	Catalog No.
10	20	35	Reactor 50 μ H (UL/CSA)	C0352378
20	40	70	Reactor 50 μ H (UL/CSA)	C0352379
30	60	110	Reactor 50 μ H (UL/CSA)	C0352380
50	100	180	Reactor 50 μ H	C0055255
60	150	250	Reactor 25 μ H	C0057960
100	200	360	Reactor 25 μ H	C0057961
150	300	550	Reactor 25 μ H	C0057962
200	400	720	Reactor 25 μ H	C0057963



CE APPROVED

RATINGS TO 180A

Three-Phase Line Reactors

Size* DC Amps	Catalog No.
15	C0466449U015
40	C0466449U040
70	C0463037
110	C0463038
180	C0463039

*Above 180 Amps use the standard line reactors listed above

1 TO 100 HP

Horsepower

240VDC	500VDC	Catalog No.
1 - 7.5	1 - 15	955 + ADC30
10 - 15	20 - 30	955 + ADC60
20 - 40	40 - 75	955 + ADC130
50	100	955 + ADC220

COMPACT DESIGN

ROOF/PANEL MOUNTING

HORSEPOWER RATED FOR EASIER SELECTION

INTEGRAL COVERS FOR ADDED SAFETY

DC Accessories

Dynamic Braking Resistors

The Dynamic Braking Resistor kits are designed for stopping a motor at full load current from base speed with 2 times motor energy, three times in rapid succession (NEMA ICS 3-302.62 Dynamic Braking Stop Option).

Dynamic braking provides a low initial cost solution when motor braking can be less precise. When braking is required frequently in the application (for example, unwinds), a regenerative drive would be a better solution.

Dynamic Braking Contact

590+ DRV frames 1, 2 and 6+ require a separate dynamic braking contact kit if dynamic braking is required.

The kits through 100 Hp use a four-pole AC contactor pre-wired to connect to the 590+ terminals.

Above 100 Hp, kits use a single-pole DC contactor that requires 120 VAC control power to close. The dynamic braking contact must be factory installed and requires a larger panel.

The Dynamic Braking Contact Kits are designed to meet NEMA dynamic braking requirements (see Dynamic Braking Resistors above).

Note: When power is lost, the DB contactor will not close on Size 6 or larger drives.

ACCESSORIES

240 VDC DB Resistors

Hp	Ohms	Catalog No.
5	8.6	CZ353160*
7.5	6.04	CZ353161*
10	4.6	CZ353162*
15	3	CZ353163*
20	2	CZ353164*
25	2	CZ353165*
30	1.4	CZ353166*
40	1	CZ353167*
50	1	CZ353168*
60	0.742	CZ353169
75	0.58	CZ353170
100	0.452	CZ353171
125	0.384	CZ353172
150	0.325	CZ353173*
200	0.255	CZ353174*
250	0.196	CZ353175*
300	0.176	CZ353176*
400	0.137	CZ353177*
500	0.1	CZ353178*

500 VDC DB Resistors

Hp	Ohms	Catalog No.
3	62	CZ353134*
5	36	CZ353135*
7.5	36	CZ353136*
10	20	CZ353137*
15	12	CZ353138*
20	10	CZ353139*
25	7	CZ353140*
30	7	CZ353141*
40	4.5	CZ353142*
50	4.5	CZ353143*
60	4	CZ353144*
75	2.8	CZ353145*
100	2	CZ353146*
125	1.71	CZ353147
150	1.28	CZ353148
200	1.11	CZ353149
250	0.768	CZ353150
300	0.72	CZ353151*
400	0.504	CZ353152*
500	0.38	CZ353153*
600	0.38	CZ353154*
700	0.288	CZ353155*
800	0.23	CZ353156*
900	0.23	CZ353157*
1000	0.2	CZ353158*

Kits with an ** require an additional dynamic braking contact.

500 VDC RATED

MEET NEMA DYNAMIC BRAKING STANDARDS

Horsepower		
240VDC	500VDC	Catalog No.
1 - 10	1 - 20	955 + DBC35
15 - 20	30 - 40	955 + DBC70
25 - 30	50 - 60	955 + DBC110
0 - 50	75 - 100	955 + DBC162
150 - 700	300 - 1500	955-DBC2400*
800 - 1000	1750 - 2000	955-DBC3000*

* Factory installed option only.

DC Accessories

590+ DRV Control Transformer

The 590+ DRV Control Transformer option enables 590+ DRVs to be used in systems that do not use 120 VAC control power.

Blower Motor Starter

The 590+ DRV Blower Motor Starter Option uses a manual motor circuit controller to provide motor overload and branch circuit protection for a single- or three-phase AC blower motor. The option mounts inside 590+ DRV DC Drives through 100 HP.

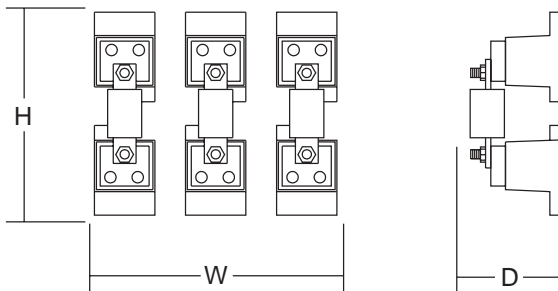
Controller AC Line Fuse Kits

The AC line fuse kits provide SCR protection for the 590+ Series controllers. Fuse kits protect drives against transients that may occur in drive supply lines. Each fuse kit contains three high speed fuses with fuseblocks.

Note:

(a) The customer is responsible for complying with all local codes when installing these fuse kits. Eurotherm Drives will not accept any responsibility for mounting the fuse kits improperly.

(b) The kits do not include panel mounting hardware.



OPERATION WITH 208 THROUGH 500 VAC SUPPLIES

MOUNTS INSIDE THE FRAME 1 AND 2 DRVS

NOT NEEDED ON DRVS ABOVE 100 Hp (AT 500 VDC)

Add -CX suffix to the 590+ DRV part number

UL LISTING AND CSA CERTIFICATION

INSTANTANEOUS MAGNETIC SHORT-CIRCUIT PROTECTION

THERMAL OVERLOAD PROTECTION WITH ADJUSTABLE TRIP CURRENT SETTING

START/STOP-RESET SWITCHING WITH "TRIPPED"

PUSHBUTTON INDICATION

NORMALLY-OPEN AUXILIARY CONTACT WIRED TO TERMINAL

Ordering Information

AMPS	Catalog No.	
	Frame 1 & 2	All Other
0.10-0.16	955 + BMS016	955-BMS160
0.16-0.25	955 + BMS025	955-BMS250
0.25-0.40	955 + BMS040	955-BMS400
0.40-0.63	955 + BMS063	955-BMS630
0.63-1.00	955 + BMS100	955-BMS110
1.00-1.60	955 + BMS160	955-BMS161
1.60-2.50	955 + BMS250	955-BMS251
2.50-4.00	955 + BMS400	955-BMS410
4.00-6.30	955 + BMS630	955-BMS631

ALL UL LISTED OR RECOGNIZED COMPONENTS

CSA CERTIFIED

300 TO 800 AMPERES

500 VAC

COMPRESSION TERMINAL FOR CONNECTIONS

Horsepower

230VAC	460VAC	Amps	Catalog No.
75	150	300	655-FK33
100	200	400	655-FK43
125	250	500	655-FK53
150	300	600	655-FK63*
200	400	800	655-FK83*

*Require ring terminals for connection.

Dimensions

Fuse Kit	Height (H)	Width (W)*	Depth (D)
655-FK33, -FK353, -FK43	8.75 (222)	8.56 (217)	4.44 (113)
655-FK63, -FK83	7.5 (191)	9.00 (229)	3.44 (87)

* Widths include minimal space for electrical clearance to equipment mounted next to the fuse kits

SUITABLE FOR MOTOR VOLTAGES 100 - 550V

IR COMPENSATION UP TO 11%

DIN RAIL MOUNTING

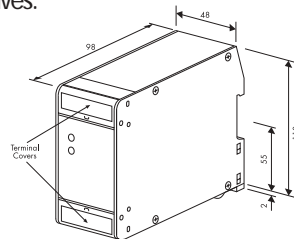
BI-DIRECTIONAL OPERATION

TRIM OUTPUT POTENTIOMETER

DC Accessories

Armature Voltage Feedback Unit 5590

This unit provides a means of isolating and attenuating motor armature voltage to levels compatible with drive input signals to give cost effective voltage feedback. It is designed specifically for use with analog drives.



Ordering Information

Description	Catalog No.
Armature voltage feedback unit	5590

3 DIGIT LCD READOUT

ACCESS TO 27 TEST POINTS

OSCILLOSCOPE/RECORDER OUTPUT

Diagnostic Unit 5570

An easy to use hand held diagnostic unit. The 5570 can be used in conjunction with the 514C and 5401 field controller. It gives access to 27 key test points on the drives, rapidly decreasing commissioning time and simplifying trouble shooting.

Ordering Information

Description	Catalog No.
Diagnostic unit	5570

RATING FOR 230 AND 480 VAC SUPPLIES

1/4 INCH TAB TERMINAL CONNECTIONS

PANEL MOUNTED

Three-Phase Line Filter

The filter provides additional protection against spikes induced on the AC line by DC controllers on 460 VAC systems. It is recommended when accessories (such as blower motors) are connected to the same main supply as the controller without isolation.

The completely wired fuse kit contains fuses and fuseblocks to provides branch circuit protection for the line filter.

Ordering Information

Description	Catalog No.
Three-phase line filter	LA048357
Fuse kit for three-phase line filter	LA353827

Note: A line filter is included in all 590+ DRVs above 100 horsepower (at 500 VDC)

