



### 3 Phase Contactor AC Input

40-50 Amp  
280/600 VAC

PATENT PENDING

- Combined SSR and EMR advantages
- Lifetime >2 million operations @ full load
- No heat sink required
- Input status LED indicator
- Wire, lug or quick connect termination
- DP contactor footprint
- CE compliant & UL/cUL recognized



### 3 Phase Contactor DC Input

40-50 Amp  
120/240 VAC

PATENT PENDING

- Combined SSR and EMR advantages
- Lifetime >2 million operations @ full load
- No heat sink required
- DC logic compatible input
- Input status LED indicator
- Wire, lug or quick connect termination
- DP contactor footprint
- CE compliant & UL/cUL recognized

#### CONTROL SPECIFICATIONS<sup>①</sup>

Control Voltage Suffix	E	F	G
Coil Voltage Range	20 - 26 VAC, 50/60 Hz	100 - 130 VAC, 50/60 Hz	208 - 240 VAC, 50/60 Hz
Min. Turn-On Voltage	20 VAC	100 VAC	208 VAC
Min. Turn-Off Voltage	12 VAC	24 VAC	48 VAC
Coil Power Consumption, Inrush	56 VA @ 24 VAC	56 VA @ 120 VAC	56 VA @ 220 VAC
Coil Power Consumption, Sealed	6.6 VA @ 24 VAC	6.6 VA @ 120 VAC	6.6 VA @ 220 VAC
Coil Terminals	10 in lb (1.13 Nm)	10 in lb (1.13 Nm)	10 in lb (1.13 Nm)

#### OUTPUT SPECIFICATIONS<sup>①</sup>

Voltage suffix	28		60	
	24 - 280 VAC		48 - 600 VAC	
Operating Voltage (50/60Hz)	24 - 280 VAC		48 - 600 VAC	
Maximum Off-State Leakage Current per channel <sup>②</sup>	0.05 mA @ 240 VAC		0.06 mA @ 480 VAC	
Load Current suffix	40		50	
Maximum Load Current per Phase @ 40°C <sup>②</sup>	40 A Resistive		50 A Resistive	
Power terminals / wire range	Dual quick connect and Binder head screws / AWG#14 - AWG#8 18 in lbs (2.1 Nm)		Dual quick connect and Box lugs / AWG#14 - AWG#6 25 in lbs (2.9 Nm)	
Screw torque requirements	18 in lbs (2.1 Nm)		25 in lbs (2.9 Nm)	

#### GENERAL SPECIFICATIONS<sup>①</sup>

Input to Output Dielectric Isolation	4000 VAC
Input/Output to Ground Dielectric Isolation	2500 VAC
Contacts (Double Break) <sup>③</sup>	Three Normally Open
Ambient Operating Temperature Range <sup>④</sup>	-20°C to 75°C
Ambient Storage Temperature Range	-40°C to 100°C
Max. Turn-On Time	16.6 mS @ 60 Hz / 20 mS @ 50 Hz
Max. Turn-Off Time	32 mS @ 60 Hz / 40 mS @ 50 Hz
Maximum Number of Operations per Minute	30 operations per min
Lifetime @ Rated Load Current, 40°C ambient temp, 30 operations/min, Rated Vcontrol	> 2 Million operations
Weight (typical)	540 grs (1.19 lb)

① Specifications @ 25°C unless otherwise noted.

② See Derating Curves for additional operational conditions.

③ The RHP includes a Solid-State Relay. Therefore, the output is never completely open.

④ The RHP includes an overtemperature protection for the Solid-State Module.

#### CONTROL SPECIFICATIONS<sup>①</sup>

Control Voltage Suffix	D5	D12	D24
Control Voltage Range	4.5 - 5.5 VDC	10 - 15 VDC	22 - 27 VDC
Max. Reverse Voltage	-5.5 VDC	-15.5 VDC	-27.5 VDC
Min. Turn-On Voltage	4.5 VDC	9.5 VDC	9.5 VDC
Min. Turn-Off Voltage	1 VDC	2 VDC	2 VDC
Input Current	12mA @ 5 VDC	12mA @ 12 VDC	12mA @ 24 VDC
Input Connector	5.31 in lb (0.6 Nm)	5.31 in lb (0.6 Nm)	5.31 in lb (0.6 Nm)

#### OUTPUT SPECIFICATIONS<sup>①</sup>

Voltage suffix	12		24	
	100 - 120 VAC		208 - 240 VAC	
Operating Voltage (50/60Hz)	100 - 120 VAC		208 - 240 VAC	
Maximum Off-State Leakage Current per channel <sup>②</sup>	0.05 mA @ 120 VAC		0.06 mA @ 240 VAC	
Load Current suffix	40		50	
Maximum Load Current per Phase @ 40°C <sup>②</sup>	40 A Resistive		50 A Resistive	
Power terminals / wire range	Dual quick connect and Binder head screws / AWG#14 - AWG#8 18 in lbs (2.1 Nm)		Dual quick connect and Box lugs / AWG#14 - AWG#6 25 in lbs (2.9 Nm)	
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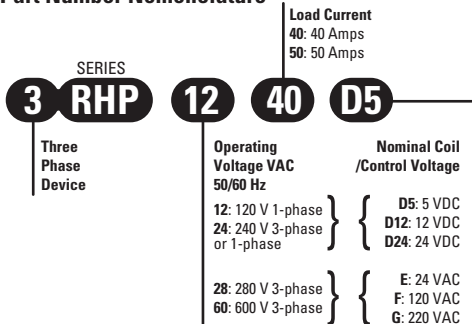
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② See Derating Curves for additional operational conditions.

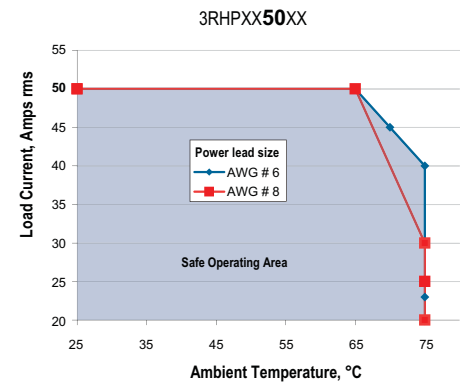
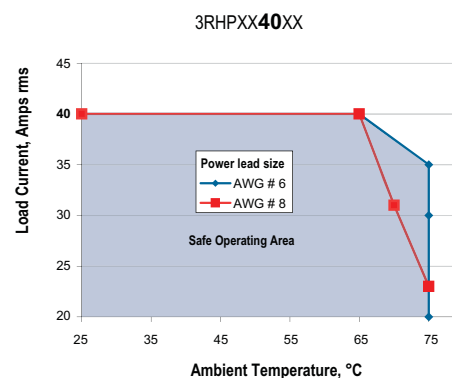
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#### Part Number Nomenclature

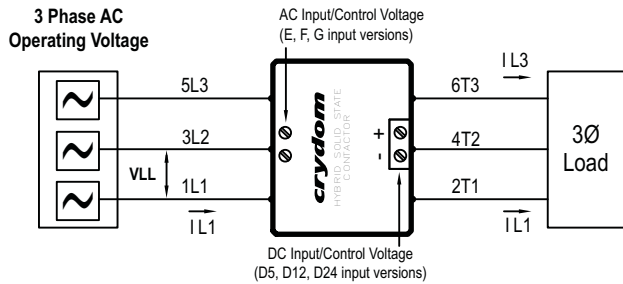


#### Derating Curves



### Typical Electrical Connection for 3 Phase Applications<sup>Ⓞ</sup>

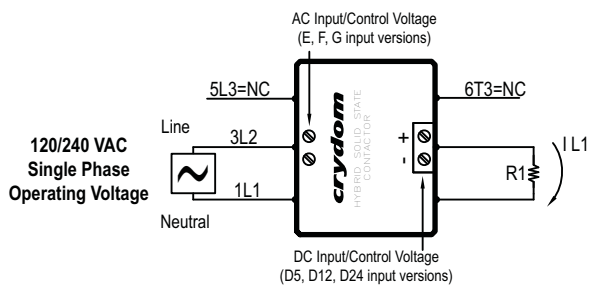
(For output voltage options 24, 28, 60)



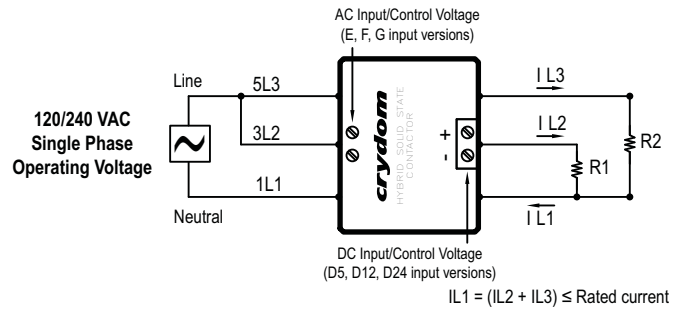
DO NOT apply any AC voltage to contactor coil connections, for DC versions only.

### Optional Electrical Connections for Single Phase Applications<sup>Ⓞ</sup>

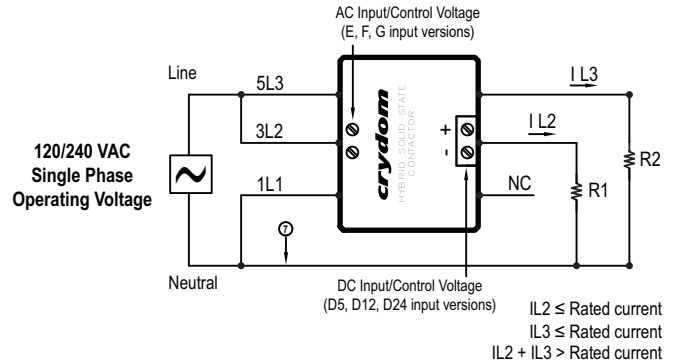
(For output voltage options 12, 24, 28, 60)



$IL1 \leq \text{Rated current}$



$IL1 = (IL2 + IL3) \leq \text{Rated current}$



$IL2 \leq \text{Rated current}$   
 $IL3 \leq \text{Rated current}$   
 $IL2 + IL3 > \text{Rated current}$

- Ⓞ Match VLL to voltage suffixes 28 & 60 for options E, F & G and 12 & 24 for options DX.
- Ⓞ The single phase supply voltage must be wired to terminal 1L1 and 3L2 for proper single phase operation.
- Ⓞ In applications switching two single phase loads (R1 and R2) where the combined load current exceeds the contactor's rating (40 or 50 Amps) the return/neutral lead must not be wired through the contactor (see above drawing).

## ⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.

- Disconnect all power before installing or working with this equipment.
- Verify all connections and replace all covers before turning on power.

Failure to follow these instructions will result in death or serious injury.

### RIESGO DE DESCARGA ELECTRICA O EXPLOSION.

- Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo.
- Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo.

El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.

### RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION

- Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil
- Vérifier tous connections, et remettre tous couverts en place avant de mettre sous

De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.

### GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.

- Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen
- Vor der Inbetriebnahme alle Anschlüsse überprüfen und alle Gehäuseteile montieren.

Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.

### RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE.

- Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura
- Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione

L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie

### RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO

- Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento
- Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento

O não cumprimento destas instruções pode levar a morte ou lesões sérias.