

## 3 Phase RHP - Hybrid Solid State Contactors



### 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
- 100k-cycle UL508 endurance rating

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

	E	F	G
Control Voltage Suffix			
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>②</sup>

Voltage suffix	28	60
Operating Voltage (50/60Hz)	24 - 280 VAC	48 - 600 VAC
Maximum Off-State Leakage Current per channel <sup>③</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	Dual quick connect and Box lugs / AWG#14 - AWG#6
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>④</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)

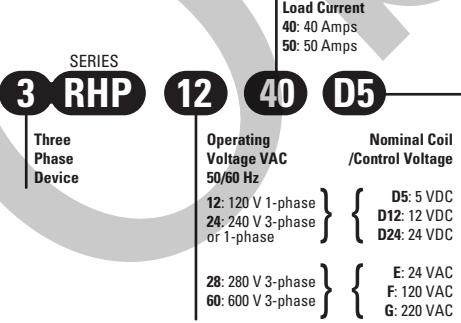
① Specifications @ 25°C unless otherwise noted.

② See Derating Curves for additional operational conditions.

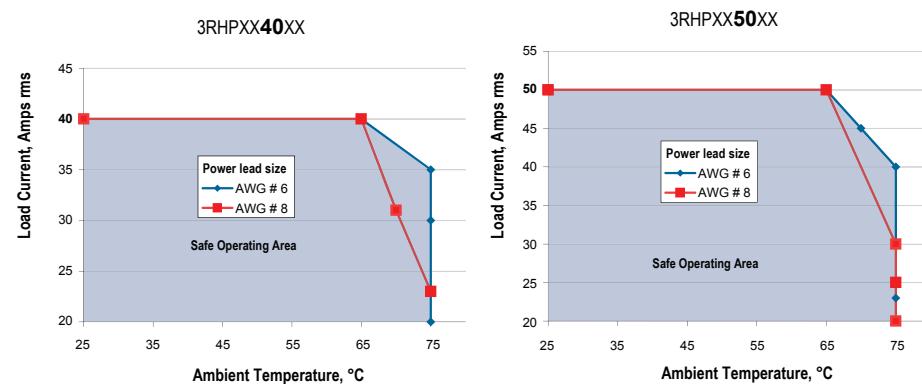
③ The RHP includes a Solid-State Relay. Therefore, the output is never completely open.

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

#### Part Number Nomenclature



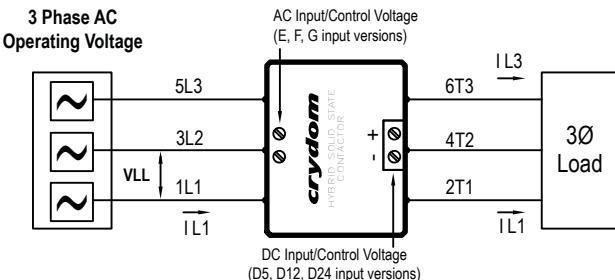
#### Derating Curves



## 3 Phase RHP - Hybrid Solid State Contactors

### Typical Electrical Connection for 3 Phase Applications<sup>⑤</sup>

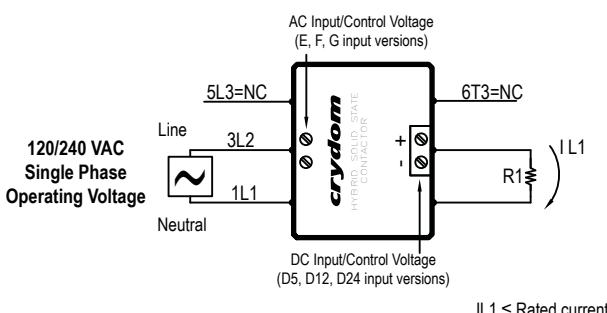
(For output voltage options 24, 28, 60)



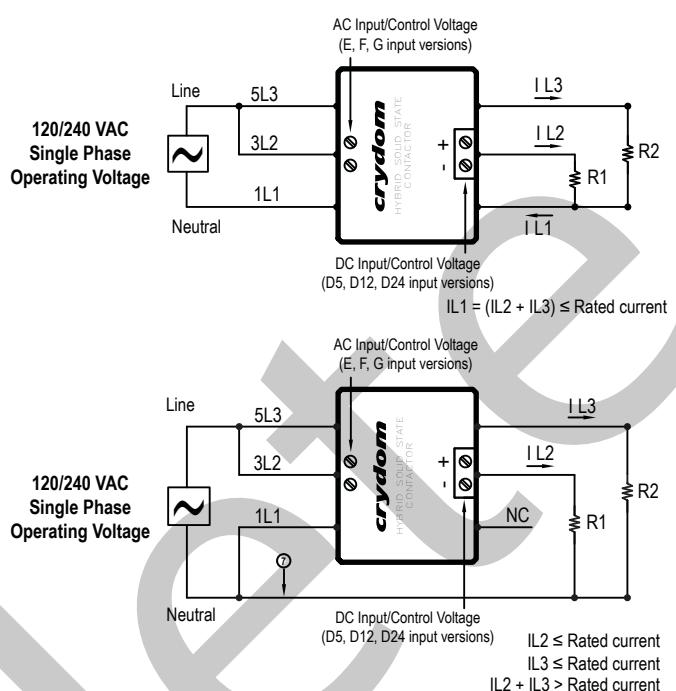
DO NOT apply any AC voltage to contactor coil connections, for DC versions only.

### Optional Electrical Connections for Single Phase Applications<sup>⑥</sup>

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



IL1 ≤ Rated current



⑤ Match VLL to voltage suffixes 28 & 60 for options E, F & G and 12 & 24 for options DX.

⑥ The single phase supply voltage must be wired to terminal 1L1 and 3L2 for proper single phase operation.

⑦ 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.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION.	RISQUE DE DESCHARGE ELECTRIQUE OU EXPLOSION	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE.	RISCO DE DESCARGA ELÉTTRICA OU EXPLOSÃO
<ul style="list-style-type: none"> <li>Disconnect all power before installing or working with this equipment.</li> <li>Verify all connections and replace all covers before turning on power.</li> </ul> <p>Failure to follow these instructions will result in death or serious injury.</p>	<ul style="list-style-type: none"> <li>Desconectar todos los suministros de energía a este equipo antes de trabajar con este equipo.</li> <li>Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo.</li> </ul> <p>El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.</p>	<ul style="list-style-type: none"> <li>Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil</li> <li>Vérifier tous connections, et remettre tous couverts en place avant de mettre sous</li> </ul> <p>De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.</p>	<ul style="list-style-type: none"> <li>Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen</li> <li>Vor der Inbetriebnahme alle Anschlüsse überprüfen und alle Gehäuseteile montieren.</li> </ul>	<ul style="list-style-type: none"> <li>Spenga tutta l'alimentazione che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura</li> <li>Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione</li> </ul> <p>L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie</p>	<ul style="list-style-type: none"> <li>Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento</li> <li>Verificar todas as conexões e recolocar todas as tampas antes de ligar o equipamento</li> </ul> <p>O não cumprimento destas instruções pode levar à morte ou lesões sérias.</p>