

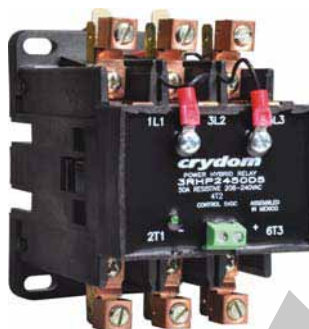


3 Phase Contactor AC Input

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



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
- 100k-cycle UL508 endurance rating

CONTROL SPECIFICATIONS^①

	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^①

	28	60
Voltage suffix		
Operating Voltage (50/60Hz)	24 - 280 VAC	48 - 600 VAC
Maximum Off-State Leakage Current per channel ^①	0.05 mA @ 240 VAC	0.06 mA @ 480 VAC
Load Current suffix		
Maximum Load Current per Phase @ 40°C ^②	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		

GENERAL SPECIFICATIONS^①

Input to Output Dielectric Isolation.	4000 VAC
Input/Output to Ground Dielectric Isolation.	2500 VAC
Contacts (Double Break) ^③	Three Normally Open
Ambient Operating Temperature Range ^④	-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^①

	D5	D12	D24
Control Voltage Suffix			
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^①

	12	24
Voltage suffix		
Operating Voltage (50/60Hz)	100 - 120 VAC	208 - 240 VAC
Maximum Off-State Leakage Current per channel ^①	0.05 mA @ 120 VAC	0.06 mA @ 240 VAC
Load Current suffix		
Maximum Load Current per Phase @ 40°C ^②	40 A Resistive	50 A Resistive
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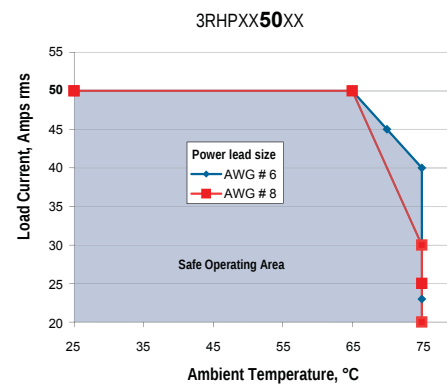
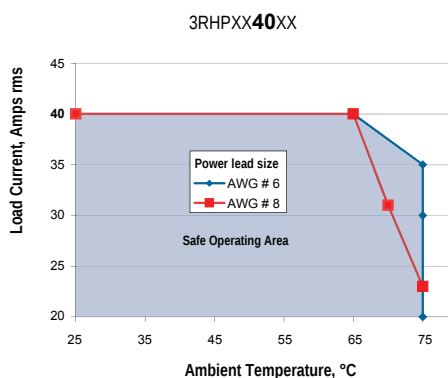
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Part Number Nomenclature

SERIES	3	12	40	D5
Three Phase Device				
Operating Voltage VAC 50/60 Hz				
12: 120 V 1-phase				
24: 240 V 3-phase or 1-phase				
28: 280 V 3-phase				
60: 600 V 3-phase				
Nominal Coil /Control Voltage				
D5: 5 VDC				
D12: 12 VDC				
D24: 24 VDC				
E: 24 VAC				
F: 120 VAC				
G: 220 VAC				

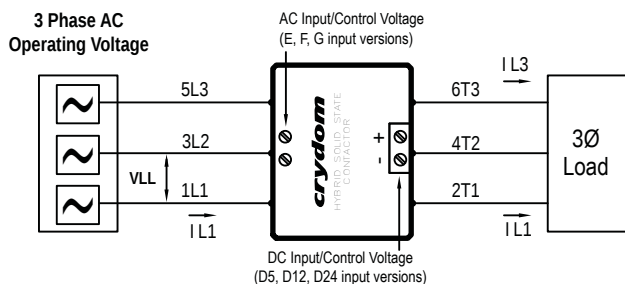
Derating Curves



3 Phase RHP - Hybrid Solid State Contactors

Typical Electrical Connection for 3 Phase Applications[Ⓢ]

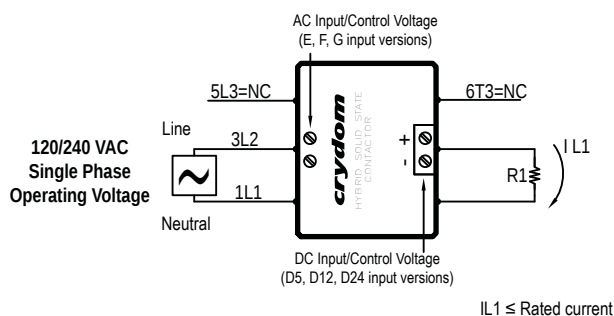
(For output voltage options 24, 28, 60)



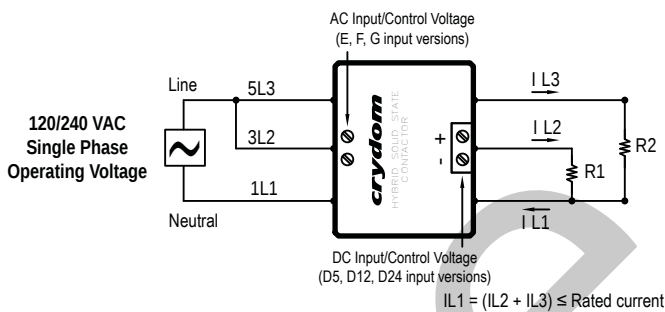
DO NOT apply any AC voltage to contactor coil connections, for DC versions only.

Optional Electrical Connections for Single Phase Applications[Ⓢ]

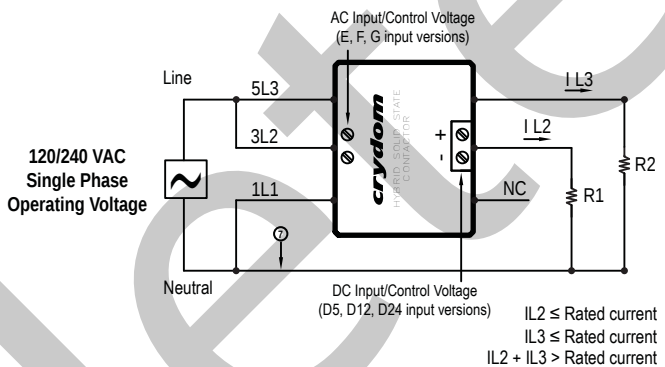
(For output voltage options 12, 24, 28, 60)



$IL1 \leq \text{Rated current}$



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



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

- Ⓢ 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 / GEEFAHR / PERICOLO / PERIGO