

## Dual Output Solid-State Relays

### Crouzet Products /Automation Controls /Solid State Relays /Dual Solid State Relays

#### PRODUCT FEATURES

- ✦ True 40 amp per channel rating at 240Vac and 480Vac
- ✦ Dual input channels for independent output operation
- ✦ Direct Bond Copper substrate for superior thermal performance
- ✦ Back-to-back SCR output for heavy industrial loads
- ✦ 4-15Vdc or 17-32Vdc per channel input rating
- ✦ Zero-crossing (resistive loads) or random-fire (inductive loads) outputs
- ✦ No external transient protection required (internal TVS)
- ✦ 4000Vac Optical Isolation
- ✦ UL/cUL Recognized, CE Compliant
- ✦ Available in 1/4" quick connect or screw terminals

[CAD File - Dual solid state relay with quick-connect terminals](#)

[CAD File - Dual solid state relay with screw-terminals](#)

[CE Manufacturer's Declaration of Conformity](#)

[RoHS Information](#)



#### Dual Output Solid State Relays (Quick-Connect Output Terminals)

Current	Output voltage	Input voltage	Termination	Switching	Part number	
25 A	24-280 V AC	4-15 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140000</a>	<a href="#">Check Stock</a>
25 A	24-280 V AC	17-32 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140010</a>	<a href="#">Check Stock</a>
40 A	24-280 V AC	4-15 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140200</a>	<a href="#">Check Stock</a>
40 A	24-280 V AC	17-32 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140210</a>	<a href="#">Check Stock</a>
25 A	48-660 V AC	4-15 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140500</a>	<a href="#">Check Stock</a>
25 A	48-660 V AC	17-32 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140510</a>	<a href="#">Check Stock</a>
40 A	48-660 V AC	4-15 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140600</a>	<a href="#">Check Stock</a>
40 A	48-660 V AC	17-32 V DC	1/4" Q.C.	Zero voltage	<a href="#">84140610</a>	<a href="#">Check Stock</a>
25 A	24-280 V AC	4-15 V DC	1/4" Q.C.	Instantaneous	<a href="#">84140100</a>	<a href="#">Check Stock</a>
25 A	24-280 V AC	17-32 V DC	1/4" Q.C.	Instantaneous	<a href="#">84140110</a>	<a href="#">Check Stock</a>
40 A	24-280 V AC	4-15 V DC	1/4" Q.C.	Instantaneous	<a href="#">84140300</a>	<a href="#">Check Stock</a>

# 280 VOLT DUAL SOLID STATE RELAYS



- ▶ 40 amp dual AC output relays
- ▶ Output voltage from 24 to 280 Vac
- ▶ Direct bond copper substrate
- ▶ Back to back dual SCR output
- ▶ 4000 Vac optical isolation
- ▶ Zero crossing or random turn on
- ▶ UL/cUL Recognized, CE Compliant



## Output Specifications

Voltage range (Vrms)	24-280Vac	
Peak Voltage (Vpk, t = 1 min.)	550	
Off-state leakage mArms (@ max. line voltage & Ta = 25°C)	0.1	
Output Current (Mounted on proper heat sink, see deratings)	25	40
Minimum Current (mArms)	100	100
Max. 1 cycle surge current (Apk, Ta = 25°C)	500	780
Max. 1 second surge current (Apk, Ta = 25°C)	150	234
Forward voltage drop (Vpk @ Imax, Ta = 25°C)	1.4	1.3
i <sup>2</sup> T (60Hz, ½ cycle)	1250	2435
Rjb (thermal res. Junction to baseplate, °C/W)	0.6	0.4
Static off-state dv/dt (Vµs, Ta = 25°C)	500	500

## Input Specifications

Input voltage	4-15Vdc	17-32Vdc
Drop out voltage	1Vdc	1Vdc
Min. input current (for on-state)	7.5mA	13mA
Maximum input current	34mA	24mA
Input Resistance (Ohms)	500	1500
Turn-on time*	8.33msec	8.33msec
Turn-off time	8.33msec	8.33msec

\* Random SSR's turn on in less than 100µs

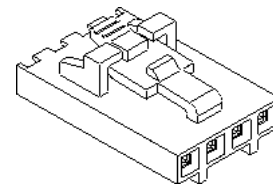
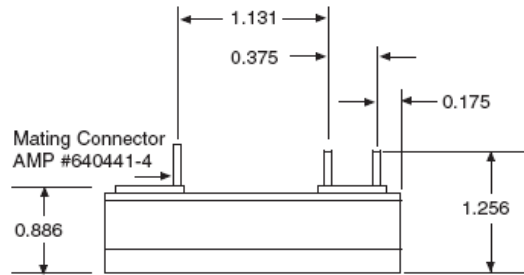
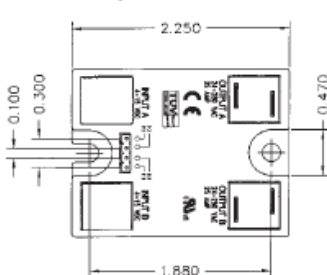
## General Characteristics

Operating Temperature (°C)	-40 to + 80
Storage Temperature (°C)	-40 to + 100
Input to output isolation	4000Vrms
Input/output to ground isolation	2500Vrms
Input to output capacitance	8pF (typical)
Operating Frequency	47 to 63 Hz
Housing Material	UL 94V0 (self extinguishing)

## Standards of Compliance

CE Compliant with the LVD 73/23/EEC  
UL / cUL Recognized per UL 508 and CSA C22.2 no. 14-M91

See next page thermal curves.



Mating Connector for 841408xxx and 841409xxx  
Molex # 50-57-9404 without pins  
Crimp Pins Molex # 16-02-0103

## Part Numbers

1/4" Quick Connect

### Zero Crossing Output

Rating	Output	Input	Part Number
25 Amp	24-280Vac	4-15Vdc	84140000
25 Amp	24-280Vac	17-32Vdc	84140010
40 Amp	24-280Vac	4-15Vdc	84140200
40 Amp	24-280Vac	17-32Vdc	84140210

### Random Fire Output

Rating	Output	Input	Part Number
25 Amp	24-280Vac	4-15Vdc	84140100
25 Amp	24-280Vac	17-32Vdc	84140110
40 Amp	24-280Vac	4-15Vdc	84140300
40 Amp	24-280Vac	17-32Vdc	84140310

## Part Numbers

Locking Connector

### Zero Crossing Output

Rating	Output	Input	Part Number
25 Amp	24-280Vac	4-15Vdc	84140800
25 Amp	24-280Vac	17-32Vdc	84140810
40 Amp	24-280Vac	4-15Vdc	84140900
40 Amp	24-280Vac	17-32Vdc	84140910

### Random Fire Output

Rating	Output	Input	Part Number
25 Amp	24-280Vac	4-15Vdc	84140801
25 Amp	24-280Vac	17-32Vdc	84140811
40 Amp	24-280Vac	4-15Vdc	84140901
40 Amp	24-280Vac	17-32Vdc	84140911

Mating Connector: Molex # 14-56-2042

## Part Numbers

Screw Terminals

### Zero Crossing Output

Rating	Output	Input	Part Number
25 Amp	24-280Vac	4-15Vdc	84140003
25 Amp	24-280Vac	17-32Vdc	84140013
40 Amp	24-280Vac	4-15Vdc	84140203
40 Amp	24-280Vac	17-32Vdc	84140213

### Random Fire Output

Rating	Output	Input	Part Number
25 Amp	24-280Vac	4-15Vdc	84140103
25 Amp	24-280Vac	17-32Vdc	84140113
40 Amp	24-280Vac	4-15Vdc	84140303
40 Amp	24-280Vac	17-32Vdc	84140313

QC, Standard Input Pins

QC, Mated/Locking Input

Standard Input Pins