

# 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	0.1	
(@ max. line voltage & Ta = 25°C)		
Output Current (Mounted on proper heat sink, see deratings)	25	40
Minimum Current (mArms)	100	100
1 cycle surge current 50-60 Hz (Apk, Ta = 25°C)	275-300	710-750
1 second surge current 50/60 Hz (Apk, Ta = 25°C)	85	150
Forward voltage drop (Vpk @ Imax, Ta = 25°C)	1.4	1.3
i <sup>2</sup> T (50-60Hz, ½ cycle)	380-370	2520-2320
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.

## 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

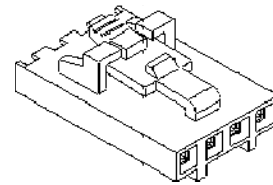
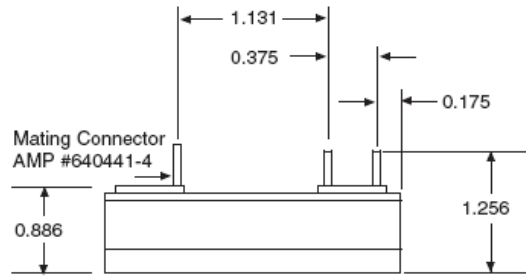
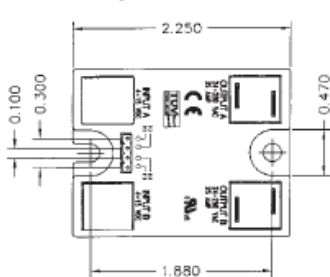
## Part Numbers Screw Terminals

### 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



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

# 660 VOLT DUAL SOLID STATE RELAYS



- ▶ 40 amp dual AC output relays
- ▶ Output voltage from 48 to 660 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



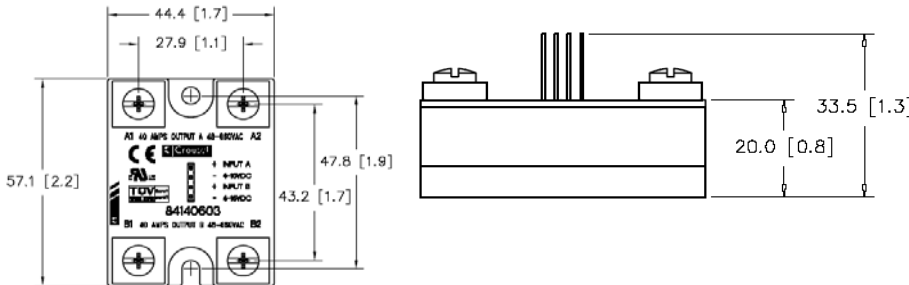
Output Specifications		
Voltage range (Vrms)	48-660Vac	
Peak Voltage (Vpk, t = 1 min.)	1000	
Off-state leakage mArms	0.25	
(@ max. line voltage & Ta = 25°C)		
Output Current (Mounted on proper heat sink, see deratings)	25	40
Minimum Current (mArms)	100	100
1 cycle surge current 50-60 Hz (Apk, Ta = 25°C)	275-300	710-750
1 second surge current 50/60 Hz (Apk, Ta = 25°C)	85	150
Forward voltage drop (Vpk @ Imax, Ta = 25°C)	1.4	1.3
i <sup>2</sup> T (50-60Hz, ½ cycle)	380-370	2520-2320
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	



## Part Numbers 1/4" Quick Connect

QC, Standard Input Pins	Zero Crossing Output			
	Rating	Output	Input	Part Number
QC, Standard Input Pins	25 Amp	48-660Vac	4-15Vdc	84140500
	25 Amp	48-660Vac	17-32Vdc	84140510
	40 Amp	48-660Vac	4-15Vdc	84140600
	40 Amp	48-660Vac	17-32Vdc	84140610
QC, Standard Input Pins	Random Fire Output			
	Rating	Output	Input	Part Number
	25 Amp	48-660Vac	4-15Vdc	84140501
	25 Amp	48-660Vac	17-32Vdc	84140511
40 Amp	48-660Vac	4-15Vdc	84140601	
40 Amp	48-660Vac	17-32Vdc	84140611	

## Part Numbers Screw Terminals

Standard Input Pins	Zero Crossing Output			
	Rating	Output	Input	Part Number
Standard Input Pins	25 Amp	48-660Vac	4-15Vdc	84140503
	25 Amp	48-660Vac	17-32Vdc	84140513
	40 Amp	48-660Vac	4-15Vdc	84140603
	40 Amp	48-660Vac	17-32Vdc	84140613
Standard Input Pins	Random Fire Output			
	Rating	Output	Input	Part Number
	25 Amp	48-660Vac	4-15Vdc	84140530
	25 Amp	48-660Vac	17-32Vdc	84140531
40 Amp	48-660Vac	4-15Vdc	84140630	
40 Amp	48-660Vac	17-32Vdc	84140631	

