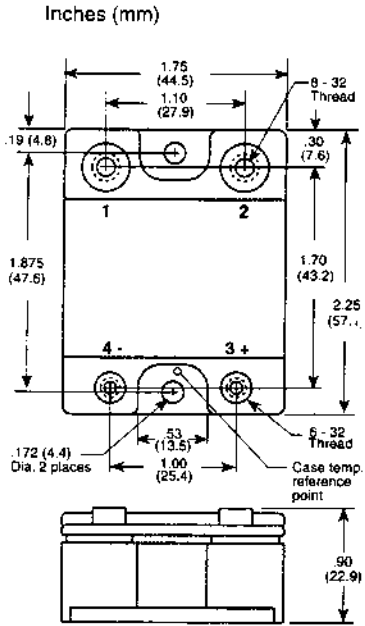
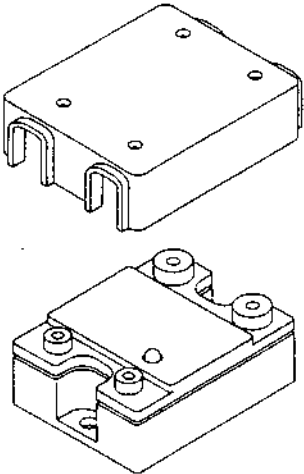


WRC AC and DC solid-state relays

Features

- LED Status indicator on AC units
- Photo isolation
- Clear Safety cover included on AC units
- 600 volt blocking voltage
- 4000 volt isolation
- Zero voltage turn-on on AC units
- Built-in snubber
- High surge capability
- 100% tested at rated current





Panel-mount Solid State Relays

GENERAL PART DEFINITIONS:

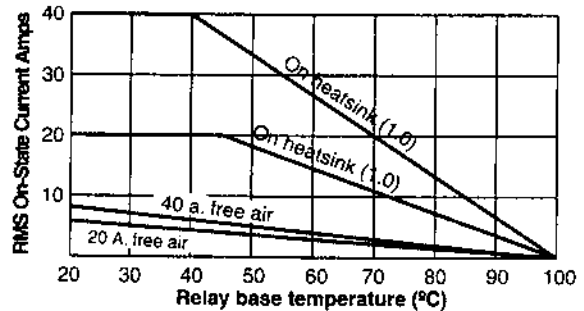
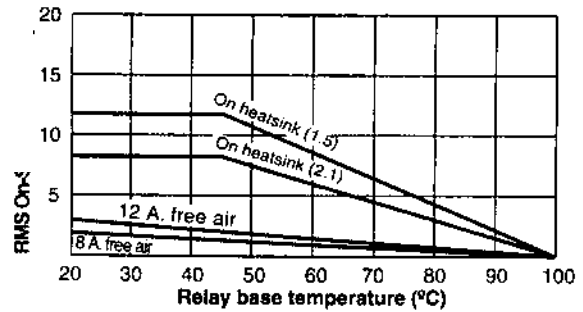
1781-xx-DC 0–100 V dc Output, xx Amps,
4–28 V dc Control

SPECIFICATIONS:

Input:	(Model)	1781-08-DC	1781-12-DC	1781-20-DC	1781-40-DC
Impedance (Rc)	kOhm	40	40	40	40
Turn-on Voltage (Min.)	V dc	3.5	3.5	3.5	3.5
Turn-off Voltage (Max.)	V dc	1	1	1	1
Current Required (Max.)	mA	15	15	15	15
Output:					
I_{OUT} (Continuous w/proper Heatsink)	A_{RMS}	8	12	20	40
Voltage drop @ I_{OUT}	V dc	2	2	3	3
I_{SURGE} (Non repetitive, 10 ms)	$A_{PEAK}/10ms$	20	30	60	120
Voltage Range (V_{OUT})	V dc	0–100	0–100	0–100	0–100
Leakage @ V_{OUT} (max.)	μA	100	100	100	100
Turn On (max.)	μs	100	100	100	100
Turn Off (max.)	μs	100	100	100	100
On-State Resistance (Max.) @ I_{OUT}	Ohm	.18	1.06	.97	.79
Thermal Resistance RAJC (Tj=1150C)	$^{\circ}C/W$	1.8	1.06	.97	.79

GENERAL CHARACTERISTICS:

Dielectric strength (Input-Output-Base) 2500V_{RMS}
 Capacitance Input to Output 8pf
 Ambient temp. range (Operating) -40 to +100°C



GENERAL PART DEFINITIONS:

1781-330-xx-DA 24-330 Vac Output, xx Amps, 4-28 Vdc Control
1781-330-xx-AA 24-330 Vac Output, xx Amps, 90-280 Vac/Vdc Control

SPECIFICATIONS:

Input: 4-28 Vdc		1781-330-10-DA	1781-330-25-DA	1781-330-40-DA	1781-330-75-DA
Impedance	Ohm	1500	1500	1500	1500
Turn-On Voltage (Max)	Vdc	4	4	4	4
Turn-Off Voltage (Min)	Vdc	1	1	1	1
Reverse Protection	Vdc	-75	-75	-75	-75
Input: 90-280 Vac/Vdc		1781-330-10-AA	1781-330-25-AA	1781-330-40-AA	1781-330-75-AA
Impedance	kOhm	40	40	40	40
Turn-On Voltage (max)	Vac/Vdc	90	90	90	90
Turn-Off Voltage (min)	Vac/Vdc	20	20	20	20
Reverse Protection	Vac/Vdc	n/a	n/a	n/a	n/a
Output (all modules)					
I_{OUT} (Continuous)	Arms	10	25	40	75
Voltage Drop @ I_{OUT}	Vac	1.65	1.65	1.50	1.50
I_{SURGE} 1 cycle (60 Hz)	A_{PEAK}	100	250	650	950
(non repetitive)					
I_{SURGE} 1 second	A_{PEAK}	40	100	130	140
Voltage Range (V_{OUT})	Vac	24-330	24-330	24-330	24-330
Over-Voltage Rating	PIV	600	600	600	600
Frequency Range	Hz	47-63	47-63	47-63	47-63
Leakage ~ $V_{OUT}(max)$	mA	8	8	8	8
Turn-On (max ~ 60 Hz)	ms	8.3 (1/2 cycle)	8.3 (1/2 cycle)	8.3 (1/2 cycle)	8.3 (1/2 cycle)
Turn-Off (max ~ 60 Hz)	ms	8.3 (1/2 cycle)	8.3 (1/2 cycle)	8.3 (1/2 cycle)	8.3 (1/2 cycle)
Holding Current (min)	mA	50	50	50	50
Zero Voltage Switching		Yes	Yes	Yes	Yes
dv/dt @ V_{OUT} (max)	V/ μ s	200	200	500	500
Commutating dv/dt snubbed for Power Factor @ I_{OUT}	P.F.	0.5	0.5	0.5	0.5
I ² t Fusing (8.3 ms)	A ² s	35	260	1750	3745
Thermal Resistance $R_{\theta JC}$ ($T_1=115C$)	$^{\circ}C/W$	1.48	1.05	0.65	0.30

GENERAL CHARACTERISTICS:

Dielectric Strength/Isolation (min) (Input-Output-Case) 4000Vrms
 Capacitance Input-to-Output 3pF
 Ambient Temperature Range -40 to +100 $^{\circ}C$