

File E73741
Project 94NK10151

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REPORT

on

SWITCHES, INDUSTRIAL CONTROL

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Winona, MN

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DESCRIPTION

PRODUCT COVERED:

Solid State Power controller without cooling fan, Part No. DC followed by 1, 2, 3, 4, 8 or 9; followed by O or T; followed by 02, 12, 20, 24, 27, 40, 48 or 60, followed by CX, FX, LX, PX, SX, K1, K2 or K3, followed by 0, C, D, H *or S, followed by any three numbers or letters.

Solid State Power controller with cooling fan, Part No. DC followed by 1, 2, 3, 4, 8 or 9; followed by 1, 2 or 3; followed by 02, 12, 20, 24, 27, 40, 48 or 60; followed by CX, FX, LX, PX, SX, K1, K2 or K3; followed by 0, C, D, H or S; followed by any three numbers or letters.

Where X equals any number 0 through 9.

GENERAL:

These devices open solid state power controllers intended for controlling electric resistance heating.

RATINGS:

These devices are either single phase or three phase, 1, 2 or 3 pole and rated as shown below:

Command or Control Signal Ratings - 24, 120, or 240 V ac, 50/60 Hz. All other devices are low voltage DC.

Output Ratings - 24 to 48 V ac, 120 to 240 V ac or 277-600 V ac, 50/60 Hz.

Models Without Cooling Fan at 50°C

55 A - 1 pole
40 A - 2 pole
30 A - 3 pole
62 A - 1 pole (through wall model only)
46 A - 2 pole (through wall model only)
35 A - 3 pole (through wall model only)

Models With Cooling Fan at 50°C

75 A - 1 pole
65 A - 2 pole
55 A - 3 pole

Control Mode Rating - 24 V ac
 120 V ac
 240 V ac

These devices may be used in ambients found as part of the derating curves in ILLS. 1, 2 and 3. The through wall version is suitable for Type 1 and 4X enclosures.

NOMENCLATURE:

<u>DC</u>	<u>X</u>	<u>X</u>	<u>XX</u>	<u>XX</u>	<u>X</u>	<u>X</u>	<u>XX</u>
I	II	III	IV	V	VI	VII	VIII
I -	DC - Basic Designator						
II -	Phase						
	1 - Single Phase - 1 pole						
	2 - Three Phase - 2 pole controlled						
	3 - Three Phase - 3 pole controlled						
	4 - Three Phase - 3 pole controlled (4 wire WYE)						
	8 - Two independently controlled poles						
	9 - Three independently controlled poles						
III -	Cooling and Heatsink options						
	0 - Natural convection standard heatsink						
	1 - 120 V ac fan cooled standard heatsink						
	2 - 240 V ac fan cooled standard heatsink						
	3 - 24 V ac fan cooled standard heatsink						
	T - Natural convection Through Wall heatsink						
IV -	Output Voltage						
	02 - 24 to 48 V ac (Control options C, F or K)						
	12 - 100 to 120 V ac (Control options L, P or S)						
	20 - 200 to 208 V ac (Control options L, P or S)						
	24 - 100 to 240 V ac (Control options C, F or K)						
	230 to 240 V ac (Control options L, P or S)						
	27 - 277 V ac (Control options L, P or S)						
	40 - 400 V ac (Control options L, P or S)						
	48 - 480 V ac (Control options L, P or S)						
	60 - 277 to 600 V ac (Control options C, F or K)						
	600 V ac (Control options L, P or S)						
V -	Control Options						
	C0 - 4.5 to 32 V dc (Contactor)						
	F0 - 4 to 20 mA dc (Variable time base)						
	F1 - 12 to 20 mA dc (Variable time base)						
	K1 - 24 V ac (Contactor)						
	K2 - 120 V ac (Contactor)						
	K3 - 240 V ac (Contactor)						
	L - Phase angle control w/current limit (Select input 0-5 below)						
	P - Phase angle control (Select input 0-5 below)						
	S - Single cycle variable time base (Select input 0-5 below)						
	0 - 4 to 20 mA dc						
	1 - 12 to 20 mA dc						
	2 - 0 to 20 mA dc						
	3 - 0 to 5 V dc						
	4 - 1 to 5 V dc						
	5 - 0 to 10 V dc						

- VI - Alarm Options
 - 0 - No alarm
 - C - Shorted SCR Alarm with transistor output
 - D - Open Heater, Shorted SCR Alarm with transistor output
(S control option only)
 - H - Open Heater, Shorted SCR Alarm with triac output
(S control option only)
 - S - Shorted SCR Alarm with triac output

- VII - User Manual Language Options
 - 0 - English Users manual
 - 1 - German Users manual
 - 2 - Spanish Users manual
 - 3 - French Users manual

- VIII - Custom Label options and other non-critical options.
 - 0 - Standard product
 - 01 to 99 or letter AA to ZZ - custom options
 - Custom Overlays
 - Custom soft start phase angle times.