SIEMENS

Data sheet US2:87LPT6MF



Pump control panel, Size 5, Three phase full voltage, Solid-state overload relay, OLR amp range 55-250A, 110-127V 50-60Hz/DC coil, Standard type contactor, 250A circuit breaker, HOA Sel Sw. <(>&<)> Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use

product brand name	Class 87
design of the product	Pump control panel with MCP
special product feature	Gravity dropout contacts; 45 degree, wedge action contacts; Self-rising pressure type control terminals; Encapsulated coil
General technical data	
weight [lb]	205 lb
Height x Width x Depth [in]	72 × 20 × 11 in
touch protection against electrical shock	NA for enclosed products
installation altitude [ft] at height above sea level maximum	6560 ft
ambient temperature [°F]	
during storage	-22 +149 °F
 during operation 	-4 +104 °F
ambient temperature	
 during storage 	-30 +65 °C
during operation	-20 +40 °C
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	50 hp
• at 220/230 V rated value	75 hp
• at 460/480 V rated value	150 hp
• at 575/600 V rated value	200 hp
Contactor	
size of contactor	NEMA controller size 5
number of NO contacts for main contacts	3
operating voltage for main current circuit at AC at 60 Hz maximum	600 V
operational current at AC at 600 V rated value	270 A
mechanical service life (operating cycles) of the main contacts typical	10000000
Auxiliary contact	
number of NC contacts at contactor for auxiliary contacts	2
number of NO contacts at contactor for auxiliary contacts	2
number of total auxiliary contacts maximum	8
contact rating of auxiliary contacts of contactor according to UL	10A@240VAC (A300), 2.5A@250VDC (Q300)
Coil	
type of voltage of the control supply voltage	AC/DC
control supply voltage	
at DC rated value	110 127 V
• at AC at 50 Hz rated value	110 127 V
• at AC at 60 Hz rated value	110 127 V

holding power at AC minimum	7.4 W
apparent pick-up power of magnet coil at AC	7.4 W 590 VA
apparent holding power of magnet coil at AC	6.7 VA
operating range factor control supply voltage rated value of magnet coil	0.85 1.1
percental drop-out voltage of magnet coil related to the input voltage	60 %
ON-delay time	30 95 ms
OFF-delay time	40 80 ms
Overload relay	
product function	
overload protection	Yes
phase failure detection	Yes
asymmetry detection	Yes
ground fault detection	No
• test function	Yes
external reset	Yes
reset function	Manual and automatic
trip class	CLASS 10
adjustable current response value current of the current- dependent overload release	55 250 A
product feature protective coating on printed-circuit board	No
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	1
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	1 A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
insulation voltage (Ui)	
 with single-phase operation at AC rated value 	600 V
with multi-phase operation at AC rated value	300 V
Enclosure	
degree of protection NEMA rating of the enclosure	NEMA Type 3R
design of the housing	Weather proof for outdoor use
Standard Control Devices	
product component Hand-Off-Auto selector switch	Yes
type of Hand-Off-Auto selector switch	30mm metal housing with matte finish
product component start push button	
type of start push button	Yes
Civavit Dyankay	30mm metal housing with matte finish
Circuit Breaker	30mm metal housing with matte finish
type of the motor protection	30mm metal housing with matte finish Motor circuit protector (magnetic trip only)
type of the motor protection operational current of motor circuit breaker rated value	30mm metal housing with matte finish Motor circuit protector (magnetic trip only) 250 A
type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit	30mm metal housing with matte finish Motor circuit protector (magnetic trip only)
type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring	30mm metal housing with matte finish Motor circuit protector (magnetic trip only) 250 A 1100 2500 A
type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position	30mm metal housing with matte finish Motor circuit protector (magnetic trip only) 250 A 1100 2500 A Vertical
type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method	30mm metal housing with matte finish Motor circuit protector (magnetic trip only) 250 A 1100 2500 A Vertical Surface mounting and installation
type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for	30mm metal housing with matte finish Motor circuit protector (magnetic trip only) 250 A 1100 2500 A Vertical
type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	30mm metal housing with matte finish Motor circuit protector (magnetic trip only) 250 A 1100 2500 A Vertical Surface mounting and installation Box lug 1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)
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AWG cables single or multi-stranded	
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection at contactor for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at contactor for auxiliary contacts	7 10 lbf-in
type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded	2x (20 16 AWG), 2x (18 14 AWG)
temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C
material of the conductor at contactor for auxiliary contacts	CU
type of electrical connection at overload relay for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf-in
type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded	2x (20 14 AWG)
temperature of the conductor at overload relay for auxiliary contacts maximum permissible	75 °C
material of the conductor at overload relay for auxiliary contacts	CU
Short-circuit current rating	
design of the short-circuit trip	Instantaneous trip circuit breaker
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	100 kA
• at 480 V	100 kA
• at 600 V	25 kA
certificate of suitability	NEMA ICS 2; UL 508
Further information	

Industrial Controls - Product Overview (Catalogs, Brochures,...)

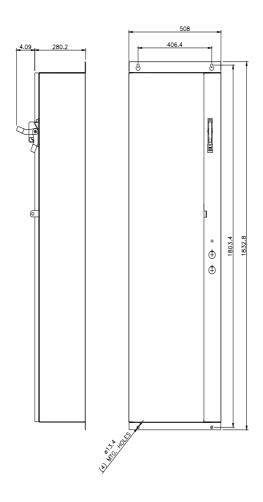
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:87LPT6MF

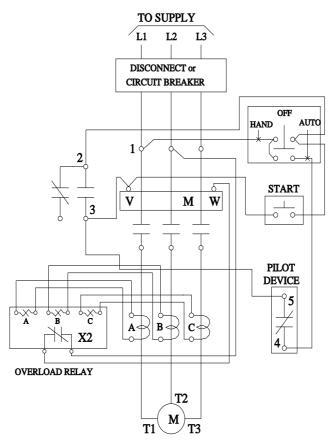
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:87LPT6MF&lang=en

Certificates/approvals

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