SIEMENS

Data sheet US2:87DUB6FF

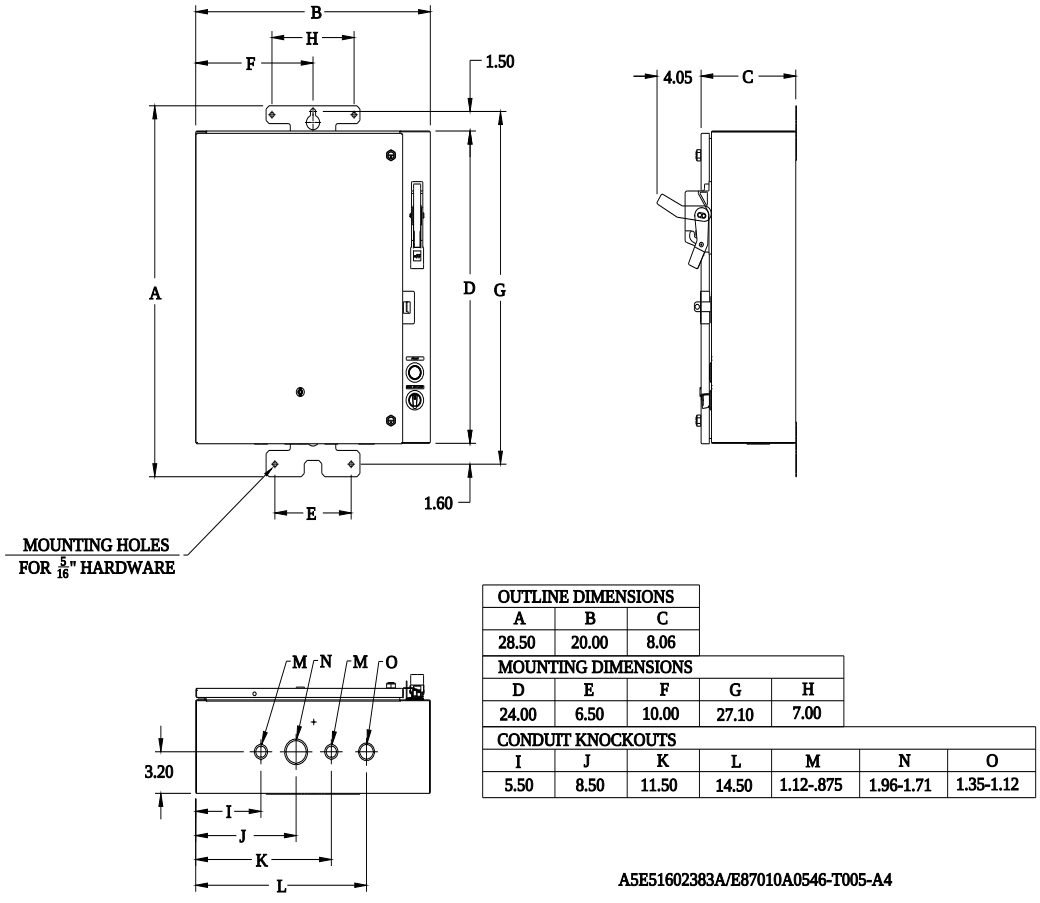
Pump control panel, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 0.75-3.4A, 110V 50Hz / 120V 60Hz coil, Standard type contactor, 30A fusible disconnect, 30A/600V fuse clip, HOA Sel Sw. <(>&<)> Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use

product brand name	Class 87
design of the product	Pump control panel with fused disconnect switch
special product feature	ESP200 overload relay
General technical data	
weight [lb]	47 lb
Height x Width x Depth [in]	29 × 20 × 8 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	0 hp
● at 220/230 V rated value	0 hp
● at 460/480 V rated value	1 hp
● at 575/600 V rated value	1 hp
Contactor	
size of contactor	NEMA controller size 1
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	27 A
mechanical service life (operating cycles) of the main contacts typical	10000000
Auxiliary contact	
number of NC contacts at contactor for auxiliary contacts	0
number of NO contacts at contactor for auxiliary contacts	1
number of total auxiliary contacts maximum	8
contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 5A@600VDC (P600)
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
● at DC rated value	0 ... 0 V
● at AC at 50 Hz rated value	110 ... 110 V
● at AC at 60 Hz rated value	120 ... 120 V
holding power at AC minimum	8.6 W

apparent pick-up power of magnet coil at AC	218 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	50 %
ON-delay time	19 ... 29 ms
OFF-delay time	10 ... 24 ms
Overload relay	
product function	
● overload protection	Yes
● phase failure detection	Yes
● asymmetry detection	Yes
● ground fault detection	Yes
● test function	Yes
● external reset	Yes
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 (factory set) / 20 / 30
adjustable current response value current of the current-dependent overload release	0.75 ... 3.4 A
tripping time at phase-loss maximum	3 s
relative repeat accuracy	1 %
product feature protective coating on printed-circuit board	Yes
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
Disconnect Switch	
response value of switch disconnector	30A / 600V
design of fuse holder	Class H fuse clips
operating class of the fuse link	Class H, J (retrofittable), K and R
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	Yes
type of start push button	30mm metal housing with matte finish
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
tightening torque [lbf·in] for supply	35 ... 35 lbf·in
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	1x (14 ... 2 AWG)
temperature of the conductor for supply maximum permissible	75 °C
material of the conductor for supply	AL or CU
type of electrical connection for load-side outgoing feeder	Screw-type terminals
tightening torque [lbf·in] for load-side outgoing feeder	20 ... 24 lbf·in
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	2x (14 ... 10 AWG)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf·in] at magnet coil	5 ... 12 lbf·in

type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	2x (16 ... 12 AWG)
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	10 ... 15 lbf·in
type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded	1x (12 AWG), 2x (16 ... 14 AWG), 2x (18 ... 16 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 fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)
certificate of suitability	NEMA ICS 2; UL 508
Further information	

Industrial Controls - Product Overview (Catalogs, Brochures,…)
www.usa.siemens.com/iccatalog
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:87DUB6FF
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/US/en/ps/US2:87DUB6FF
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:87DUB6FF&lang=en
Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/US2:87DUB6FF/certificate



OUTLINE DIMENSIONS		
A	B	C
28.50	20.00	8.06

MOUNTING DIMENSIONS				
D	E	F	G	H
24.00	6.50	10.00	27.10	7.00

CONDUIT KNOCKOUTS						
I	J	K	L	M	N	O
5.50	8.50	11.50	14.50	1.12-.875	1.96-1.71	1.35-1.12

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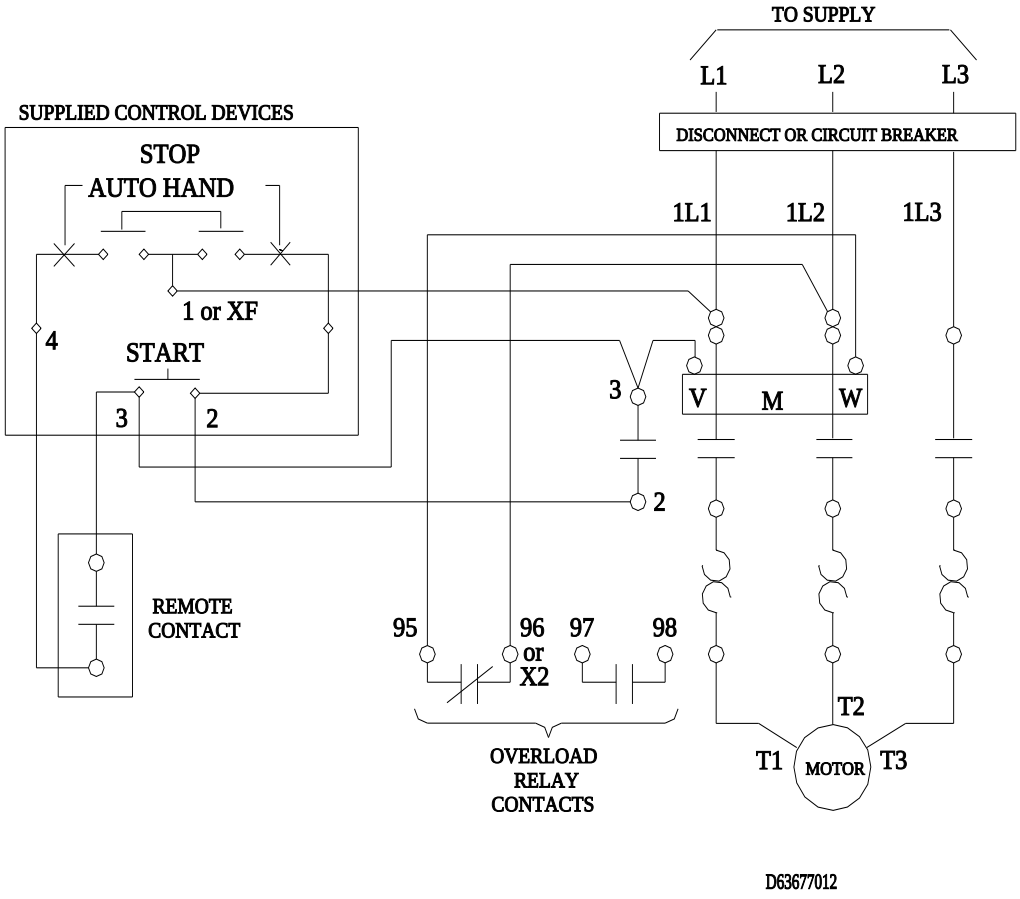

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