



Pump control panel, Size 1 3/4, Three phase full voltage, Solid-state overload relay, OLR amp range 10-40A, 190-220/220-240V 50/60Hz 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	Half-size controller; 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	15 hp
• at 575/600 V rated value	15 hp
Contactor	
size of contactor	Controller half size 1 3/4
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	40 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	190 ... 220 V
• at AC at 60 Hz rated value	220 ... 240 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
percentual 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	10 ... 40 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 disconnecter	30A / 600V
design of fuse holder	Class H fuse clips
operating class of the fuse link	Class H, J (retrofitable), 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	45 ... 45 lbf-in
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	1x (14 ... 2 AWG)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	AL or CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf-in] at magnet coil	5 ... 12 lbf-in

