## **SIEMENS**

Data sheet US2:88JUHT4MH

	Reduced voltage pump panel, Auto transformer, Size 4, 460V 3-phase motor voltage, Solid-state overload relay, OLR amp range 50-200A, 380-440/440-480V 50/60Hz coil, 150A circuit breaker, HOA Sel Sw. <(>&<)> Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use
product brand name	Class 88
design of the product	Reduced voltage pump panel with MCP - Auto transformer
special product feature	ESP200 overload relay
General technical data	
weight [lb]	360 lb
Height x Width x Depth [in]	75 × 28 × 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
<ul><li>during operation</li></ul>	-4 +104 °F
ambient temperature	
during storage	-30 +65 °C
during operation	-20 +40 °C
country of origin	USA
Horsepower ratings	
vielded 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	100 hp
• at 575/600 V rated value	0 hp
Contactor	
size of contactor	NEMA controller size 4
number of NO contacts for main contacts	3
operating voltage for main current circuit at AC at 60 Hz maximum	460 V
operational current at AC at 600 V rated value	135 A
mechanical service life (operating cycles) of the main contacts typical	5000000
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	7
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	380 440 V
at AC at 60 Hz rated value	440 480 V
holding power at AC minimum	22 W
apparent pick-up power of magnet coil at AC	510 VA
apparent holding power of magnet coil at AC	51 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	18 34 ms
OFF-delay time	10 12 ms
Overload relay	

product function	V
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	50 200 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)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
with multi-phase operation at AC rated value	300 V
Enclosure	
degree of protection NEMA rating of the enclosure	NEMA 3/3R
design of the housing	Weather proof for outdoor use
Circuit Breaker	
type of the motor protection	Motor circuit protector (magnetic trip only)
operational current of motor circuit breaker rated value	150 A
adjustable current response value current of instantaneous	800 1500 A
short-circuit trip unit	
Mounting position	Vertical
mounting position	v Gritical
factoning method	Surface mounting and installation
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
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	Box lug 1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)
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 temperature of the conductor for supply maximum permissible	Box lug 1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil) 75 °C
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 temperature of the conductor for supply maximum permissible material of the conductor for supply	Box lug 1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil) 75 °C AL or CU
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf·in
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf·in  1x (6 AWG 250 MCM)
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf·in
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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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf-in  1x (6 AWG 250 MCM)  75 °C  CU
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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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf·in  1x (6 AWG 250 MCM)  75 °C  CU  Screw-type terminals  5 12 lbf·in
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf·in  1x (6 AWG 250 MCM)  75 °C  CU  Screw-type terminals  5 12 lbf·in  2x (16 12 AWG)
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf-in  1x (6 AWG 250 MCM)  75 °C  CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)
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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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf-in  1x (6 AWG 250 MCM)  75 °C  CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)  75 °C  CU  Screw-type terminals
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at contactor for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf-in  1x (6 AWG 250 MCM)  75 °C  CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)  75 °C  CU  Screw-type terminals  10 15 lbf-in
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection at contactor for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts maximum permissible	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf-in  1x (6 AWG 250 MCM)  75 °C  CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)  75 °C  CU  Screw-type terminals  10 15 lbf-in  1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)  75 °C
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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at contactor for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts type of connectable conductor at contactor for auxiliary contacts maximum permissible material of the conductor at contactor for auxiliary contacts maximum permissible material of the conductor at contactor for auxiliary contacts maximum permissible	Box lug  1x (6 AWG 350 Kcmil) or 1x (4 AWG 350 Kcmil)  75 °C  AL or CU  Box lug  200 200 lbf-in  1x (6 AWG 250 MCM)  75 °C  CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)  75 °C  CU  Screw-type terminals  10 15 lbf-in  1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)
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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; CSA 22.2, No.14
Forth and of annual and	

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=US2:88JUHT4MH

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:88JUHT4MH

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:88JUHT4MH&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:88JUHT4MH&lang=en</a>

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:88JUHT4MH/certificate