SIEMENS

Data sheet

US2:88IUHT4FH

	Reduced voltage pump panel, Auto transformer, Size 3 1/2, 460V 3-phase motor voltage, Solid-state overload relay, OLR amp range 50-200A, 380-440/440-480V 50/60Hz coil, 200A fusible disconnect, 200A/600V fuse clip, 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 fusible disconnect - Auto transformer
special product feature	Latest technology in arc quenching to extend contactor life; Same coil voltage is AC or DC
General technical data	
weight [lb]	306 lb
Height x Width x Depth [in]	55 × 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
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	
	75 hp
• at 575/600 V rated value	0 hp
Contactor	
size of contactor	Controller half size 3 1/2
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	115 A
mechanical service life (operating cycles) of the main contacts typical	500000
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	14 W
apparent pick-up power of magnet coil at AC	310 VA
apparent holding power of magnet coil at AC	26 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	26 41 ms
OFF-delay time	14 19 ms
Overload relay	

product function	Nee.
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)	
• 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	200A / 600V
design of fuse holder	Class R fuse clips
operating class of the fuse link	Class R
Enclosure	
degree of protection NEMA rating of the enclosure	NEMA 3/3R
design of the housing	Weather proof for outdoor use
Mounting/wiring	
mounting, writing	
mounting position	Vertical
	Vertical Surface mounting and installation
mounting position	
mounting position fastening method	Surface mounting and installation
mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for	Surface mounting and installation Box lug
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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil)
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 temperature of the conductor for supply maximum permissible	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C
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 temperature of the conductor for supply maximum permissible material of the conductor for supply	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU
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 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug
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 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in
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 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)
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 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 type of connectable conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU
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 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 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals
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 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 type of cleatrical connection 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU
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 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 type of connectable 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	Surface mounting and installationBox lug1x (6 AWG 300 Kcmil)75 °CAL or CUBox lug120 120 lbf·in1x (14 2/0 AWG)75 °CAL or CUScrew-type terminals5 12 lbf·in
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 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 dr 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf·in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG)
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 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 type of connectable 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C
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 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	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C CU
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 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 rorss-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 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 at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection at contactor for auxiliary contacts type of electrical connection at contactor for auxiliary contacts type of electrical connection at contactor for auxiliary contacts	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C CU Screw-type terminals
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 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 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 type of electrical connection at contactor for auxiliary contacts type of electrical connection at contactor for auxiliary contacts type of electrical connection at contactor for auxiliary contacts type of electrical conn	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf-in
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 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 tightening torque [lbf-in] at magnet coil type of 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 tightening torque [lbf-in] at contactor for auxiliary contacts	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf·in 1x (14 2/0 AWG) 75 °C AL or 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)
mounting positionfastening methodtype of electrical connection for supply voltage line-sidetype of connectable conductor cross-sections at line-side for AWG cables single or multi-strandedtemperature of the conductor for supply maximum permissiblematerial of the conductor for supplytype of electrical connection for load-side outgoing feedertightening torque [lbf-in] for load-side outgoing feedertype of connectable conductor for load-side outgoing feedertype of connectable conductor for load-side outgoing feedertype of connectable conductor for load-side outgoing feedermaximum permissiblematerial of the conductor for load-side outgoing feedermaximum permissiblematerial of the conductor for load-side outgoing feedertype of electrical connection of magnet coiltightening torque [lbf-in] at magnet coiltype of connectable conductor cross-sections of magnet coil for AWG cables single or multi-strandedtemperature of the conductor at magnet coil maximum permissiblematerial of the conductor at contactor for auxiliary contactstightening torque [lbf-in] at contactor for auxiliary contactstype of cables for auxiliary contactstype of cables for auxiliary contacts single or multi-strandedtemperature of the conductor at contactor for auxiliary contactstype of cables for auxiliary contacts single or multi-strandedtemperature of the conductor at contactor for auxiliary contactstype of electrical connection at contactor for auxiliary contactstype of electrical connection at contactor for auxiliary contactsty	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 12 AWG) 75 °C CU Screw-type terminals 10 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
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 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 type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil type of connectable 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 type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-strande	Surface mounting and installationBox lug1x (6 AWG 300 Kcmil)75 °CAL or CUBox lug120 120 lbf-in1x (14 2/0 AWG)75 °CAL or CUScrew-type terminals5 12 lbf-in2x (16 12 AWG)75 °CCUScrew-type terminals10 15 lbf-in1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)75 °CCUScrew-type terminals
mounting positionfastening methodtype of electrical connection for supply voltage line-sidetype of connectable conductor cross-sections at line-side for AWG cables single or multi-strandedtemperature of the conductor for supply maximum permissiblematerial of the conductor for supplytype of electrical connection for load-side outgoing feedertightening torque [lbf-in] for load-side outgoing feedertype of connectable conductor for load-side outgoing feedertype of connectable conductor for load-side outgoing feedertype of connectable conductor for load-side outgoing feedermaximum permissiblematerial of the conductor for load-side outgoing feedermaximum permissiblematerial of the conductor for load-side outgoing feedertype of electrical connection of magnet coiltightening torque [lbf-in] at magnet coiltype of connectable conductor cross-sections of magnet coil for AWG cables single or multi-strandedtemperature of the conductor at magnet coil maximum permissiblematerial of the conductor at contactor for auxiliary contactstightening torque [lbf-in] at contactor for auxiliary contactstype of cables for auxiliary contactstype of cables for auxiliary contacts single or multi-strandedtemperature of the conductor at contactor for auxiliary contactstype of cables for auxiliary contacts single or multi-strandedtemperature of the conductor at contactor for auxiliary contactstype of electrical connection at contactor for auxiliary contactstype of electrical connection at contactor for auxiliary contactsty	Surface mounting and installation Box lug 1x (6 AWG 300 Kcmil) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or 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 CU Screw-type terminals 10 15 lbf-in 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) 75 °C CU

for AWG cables for auxiliary contacts single or multi-stranded	
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; CSA 22.2, No.14
Further information	
Industrial Controls - Product Overview (Catalogs, Brochures,) www.usa.siemens.com/iccatalog Industry Mall (Online ordering system) https://mall.industry.eigenee.com/mall/on/us/Catalog/product?m/fb=LIS2:881/UET4EH	

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:88IUHT4FH

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:88IUHT4FH

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:88IUHT4FH&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:88IUHT4FH/certificate

last modified:

11/29/2021 🖸