## SIEMENS

## Data sheet

## US2:87MSW6FH



Pump control panel, Size 6, Three phase full voltage, Solidstate overload relay, OLR amp range 160-630A, 440-480V 50-60HzDC coil, Standard type contactor, 600A fusible disconnect, 600A-600V fuse clip, HOA Sel Sw. and Start P.B., Enclosure NEMA type 3-3R, Weather proof outdoor use

product brand name	Class 87
product brand name	Pump control panel with fused disconnect switch
design of the product	
special product feature	Gravity dropout contacts; 45 degree, wedge action contacts; Self-rising pressure type control terminals; Encapsulated coil
General technical data	
weight [lb]	240 lb
Height x Width x Depth [in]	79 × 22 × 13 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	250 hp
• at 575/600 V rated value	0 hp
Contactor	
size of contactor	NEMA controller size 6
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	540 A
mechanical service life (operating cycles) of the main contacts typical	1000000
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	440 480 V
• at AC at 50 Hz rated value	440 480 V
• at AC at 60 Hz rated value	440 480 V

holding nower at AC minimum	10 W
holding power at AC minimum	10 W 830 VA
apparent pick-up power of magnet coil at AC	830 VA 0.85 1.1
operating range factor control supply voltage rated value of magnet coil	0.00 1.1
percental drop-out voltage of magnet coil related to the input voltage	60 %
ON-delay time	45 100 ms
OFF-delay time	60 100 ms
Overload relay	
product function	
<ul> <li>overload protection</li> </ul>	Yes
<ul> <li>phase failure detection</li> </ul>	Yes
<ul> <li>asymmetry detection</li> </ul>	Yes
<ul> <li>ground fault detection</li> </ul>	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	160 630 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
<ul> <li>operational current of auxiliary contacts of overload relay</li> <li>at AC at 600 V</li> </ul>	5 A
	1A
at DC at 250 V	
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
insulation voltage (Ui)	600 V /
with single-phase operation at AC rated value	600 V
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V
Disconnect Switch	
Disconnect Switch	6004 / 600V
response value of switch disconnector	600A / 600V Class H fuse clips
response value of switch disconnector design of fuse holder	Class H fuse clips
response value of switch disconnector design of fuse holder operating class of the fuse link	
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure	Class H fuse clips Class H, J (retrofittable), K and R
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure	Class H fuse clips Class H, J (retrofittable), K and R
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button Mounting/wiring	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish
response value of switch disconnector         design of fuse holder         operating class of the fuse link         Enclosure         degree of protection NEMA rating of the enclosure         design of the housing         Standard Control Devices         product component Hand-Off-Auto selector switch         type of Hand-Off-Auto selector switch         product component start push button         type of start push button         Mounting/wiring         mounting position	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish
response value of switch disconnector         design of fuse holder         operating class of the fuse link         Enclosure         degree of protection NEMA rating of the enclosure         design of the housing         Standard Control Devices         product component Hand-Off-Auto selector switch         type of Hand-Off-Auto selector switch         product component start push button         type of start push button         Mounting/wiring         mounting position         fastening method	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation
response value of switch disconnector         design of fuse holder         operating class of the fuse link         Enclosure         degree of protection NEMA rating of the enclosure         design of the housing         Standard Control Devices         product component Hand-Off-Auto selector switch         type of Hand-Off-Auto selector switch         product component start push button         type of start push button         Mounting/wiring         mounting position         fastening method         type of connectable conductor cross-sections at line-side for	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug
response value of switch disconnector         design of fuse holder         operating class of the fuse link         Enclosure         degree of protection NEMA rating of the enclosure         design of the housing         Standard Control Devices         product component Hand-Off-Auto selector switch         type of Hand-Off-Auto selector switch         product component start push button         type of start push button         Mounting/wiring         mounting position         fastening method         type of connectable conductor cross-sections at line-side for         AWG cables single or multi-stranded	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil)
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button type of start push button 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 temperature of the conductor for supply maximum permissible	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button type of start push button 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 temperature of the conductor for supply maximum permissible material of the conductor for supply	Class H fuse clips Class H, J (retrofittable), K and R Veather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C AL or CU
response value of switch disconnector         design of fuse holder         operating class of the fuse link         Enclosure         degree of protection NEMA rating of the enclosure         design of the housing         Standard Control Devices         product component Hand-Off-Auto selector switch         type of Hand-Off-Auto selector switch         product component start push button         type of start push button         Mounting/wiring         mounting position         fastening method         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	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C AL or CU Box lug
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button type of start push button 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 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	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C AL or CU Box lug 180 220 lbf-in
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button type of start push button 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 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 cross-sections for AWG cables for load-side outgoing feeder	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C AL or CU Box lug 180 220 lbf-in 2x 2/0 AWG 500 MCM
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button type of start push button 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 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 cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder maximum permissible	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C AL or CU Box lug 180 220 lbf-in 2x 2/0 AWG 500 MCM 75 °C
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button type of start push button 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 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 for signed or MWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply maximum permissible material of the conductor for load-side outgoing feeder type of connectable conductor 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 maximum permissible	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C AL or CU Box lug 180 220 lbf-in 2x 2/0 AWG 500 MCM 75 °C
response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Standard Control Devices product component Hand-Off-Auto selector switch type of Hand-Off-Auto selector switch product component start push button type of start push button type of start push button 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 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 for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder tightening torque [lbf-in] 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 for load-side outgoing feeder maximum permissible	Class H fuse clips Class H, J (retrofittable), K and R NEMA Type 3R Weather proof for outdoor use Yes 30mm metal housing with matte finish Yes 30mm metal housing with matte finish Vertical Surface mounting and installation Box lug 2x (3/0 500 kcmil) or 2x (4/0 500 kcmil) 75 °C AL or CU Box lug 180 220 lbf-in 2x 2/0 AWG 500 MCM 75 °C CU

permissible	
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 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=US2:87MSW6FH

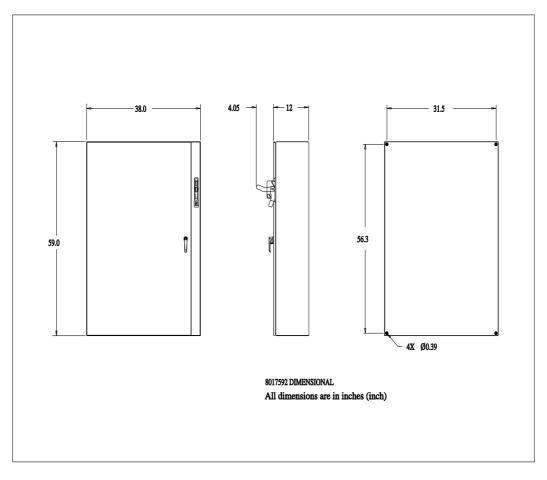
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:87MSW6FH

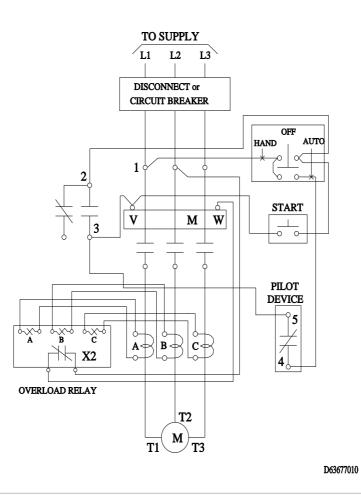
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:87MSW6FH&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:87MSW6FH/certificate





last modified:

1/25/2022 🖸