

EPS-ECONOMY PUMP STARTER

NEMA 1 & 3R ENCLOSURES



EPS-ECONOMY PUMP STARTER - 1 & 3 PHASE, 50/60HZ, 200-600 VAC, 1-80A

The enhanced Franklin Electric Economy Pump Starter (EPS) provides a simple and dependable starting option with a wide electronic overload range that meets submersible standards for overload protection. Offered exclusively through water systems distributors for agricultural and industrial applications, the EPS accepts 200-600 VAC while covering submersible systems between five and 20 horsepower at 200V, five and 25 horsepower at 230V, and five and 50 horsepower at 480V in just three models. It is available with a NEMA 3R enclosure for indoor and outdoor use or a cost-effective NEMA 1 enclosure with a smaller footprint for better installation flexibility. Internally, the EPS features a circuit breaker with easy-to-replace components to eliminate the need to replace burnt fuses. It has a true plug-and-play design that is compatible with single- and three-phase products, is CSA and UL approved, and includes a dry contact auto-run input and fault relay output.

FEATURES

Integrated Electronic Overload Protection

- Class S electronic overload protection specifically designed for submersible motors
- Phase loss protection

Multi-Voltage Operating Range with Automation I/O

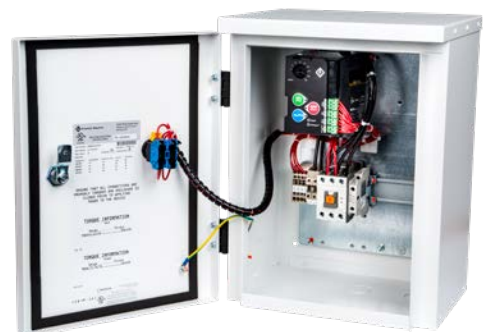
- Accepts 200-600 VAC directly with no adjustments, true plug and play
- Control I/O includes a dry contact auto-run input and fault relay output

Industrial Grade Construction

- High reliability
- Door mounted, heavy-duty HOA switch
- NEMA 1, 3R, 4, and 4X enclosure options; 3R enclosed EPS have a Service Entrance Rated circuit breaker disconnect option
- NEMA/IEC rated contactors that will survive up to 2.5 million electrical cycles
- Thoroughly tested and designed to run on multiple power sources – power line, generators, phase converters

Factory Installed Options Available

- Surge suppressors
- Control power transformer
- Fault and run pilot lights
- Keyed HOA switch
- Float switch control terminals



EPS-ECONOMY PUMP STARTER

ORDERING INFORMATION

3-Phase, 50/60 Hz, 200-600 VAC, NEMA Type 3R Enclosed - Combination Starter. Includes Service Entrance Circuit Breaker Disconnect.

Part No.	200 V - 460 V SFA Range* (A)	600 V SFA Range* (A)	3-PHASE Max. SFA*				Contactor NEMA Size
			200 V	230 V	460 V	600 V	
			SFA	SFA	SFA	SFA	
EPS3R-S0-R-G15	6-8	6-8	8	8	8	8	0
EPS3R-S0-R-G20	8-11	8-11	11	11	11	11	
EPS3R-S0P-R-G30	12-17	12-17	17	17	17	17	0+
EPS3R-S0P-R-G40	16-22	16-22	22	22	22	22	
EPS3R-S1P-R-G50	20-28	20-28	28	28	28	28	1+
EPS3R-S1P-R-G60	24-32	24-32	32	32	32	32	
EPS3R-S2-R-G80	32-45	32-45	45	45	45	45	2
EPS3R-S2-R-G100	40-52	40-52	52	52	52	52	
EPS3R-S3-R-G125	50-71	50-71	71	71	71	71	3
EPS3R-S3P-R-G150	60-80	60-77	80	80	80	77	3+

* Use SFA Range or Max. SFA when sizing for submersible motor applications; if an amperage value for SFA is not published on the motor nameplate, consider SFA range to be FLA range

ORDERING INFORMATION

3-Phase, 50/60 Hz, 200-600 VAC, NEMA Type 3R Enclosed - Standard Starter. Disconnect Not Included.

Part No.	200 V - 460 V SFA Range* (A)	600 V SFA Range* (A)	3-PHASE Max. SFA*				Contactor NEMA Size
			200 V	230 V	460 V	600 V	
			SFA	SFA	SFA	SFA	
EPS3R-S1P-R-32	1-32	1-32	32	32	32	32	1+
EPS3R-S2-R-52	22-52	22-52	52	52	52	52	2
EPS3R-S3P-R-80	50-80	50-77	80	80	80	77	3+

* Use SFA Range or Max. SFA when sizing for submersible motor applications; if an amperage value for SFA is not published on the motor nameplate, consider SFA range to be FLA range

ORDERING INFORMATION

3-Phase, 50/60 Hz, 200-600 VAC, NEMA Type 1 Enclosed - Standard Starter. Disconnect Not Included.

Part No.	200 V - 460 V SFA Range* (A)	600 V SFA Range* (A)	3-PHASE Max. SFA*				Contactor NEMA Size
			200 V	230 V	460 V	600 V	
			SFA	SFA	SFA	SFA	
EPS1-S1P-R-32	1-32	1-32	32	32	32	32	1+
EPS1-S2-R-52	22-52	22-52	52	52	52	52	2
EPS1-S3P-R-80	50-80	50-77	80	80	80	77	3+

* Use SFA Range or Max. SFA when sizing for submersible motor applications; if an amperage value for SFA is not published on the motor nameplate, consider SFA range to be FLA range

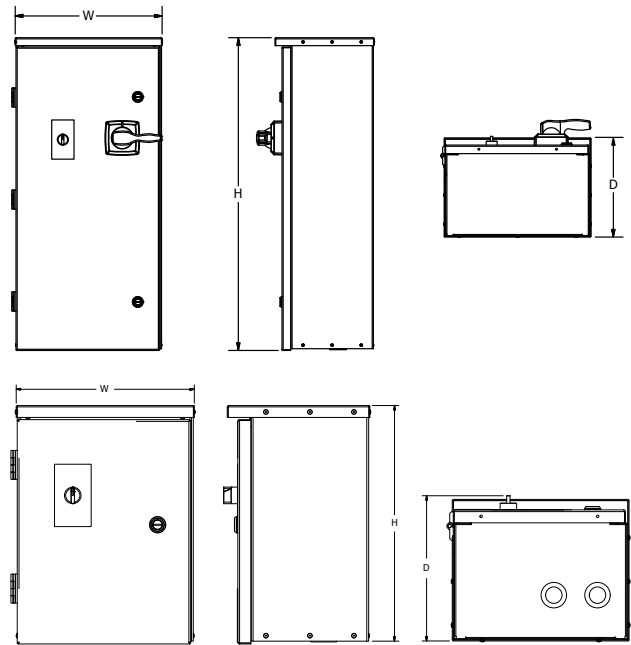
FACTORY INSTALLABLE OPTIONS (3R ONLY)

Part No.	Description
EPS-HOA-KEY	Keyed HOA Switch
EPS-RPL-120V	Run Pilot Light
EPS-FPL-120V	Fault Pilot Light
EPS-SRG	Surge Suppressor, Corner Grounded Power (up to 480V)
EPS-SRG-240V	Surge Suppressor, 200/230V
EPS-SRG-480V	Surge Suppressor, 460V
EPS-SRG-600V	Surge Suppressor, 600V
EPS-2FC	Float Switch Control Terminals

EPS-ECONOMY PUMP STARTER

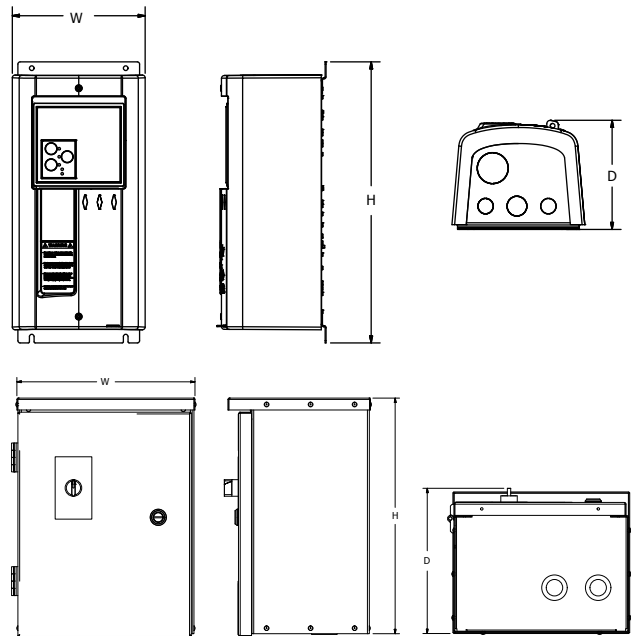
DIMENSIONS: NEMA 3R ENCLOSURE

Combination Starter	Dimensions (in)		
	H	W	D
EPS3R-S0-R-GXX	22	15	10
EPS3R-S0P-R-GXX			
EPS3R-S1-R-GXX			
EPS3R-S1P-R-GXX			
EPS3R-S2-R-GXX	32	15	10
EPS3R-S3-R-GXX			
EPS3R-S3P-R-GXX			
Standard Starter	H	W	D
EPS3R-S1P-R-32	16	12	8
EPS3R-S1P-R-32			
EPS3R-S1P-R-32			



DIMENSIONS: NEMA 1 ENCLOSURE

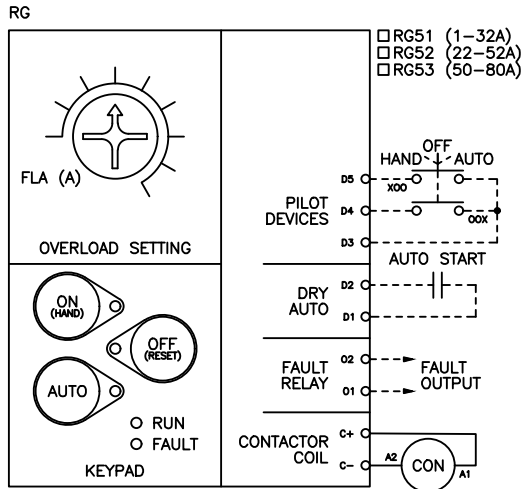
Combination Starter	Dimensions (in)		
	H	W	D
EPS3R-S0-R-GXX	16	7.5	6
EPS3R-S0P-R-GXX	16	12	8
EPS3R-S1-R-GXX			



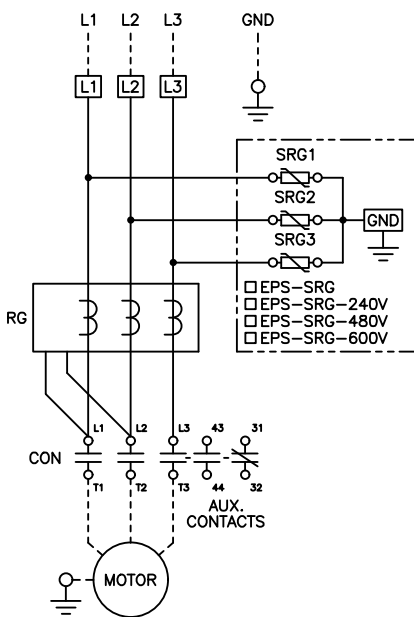
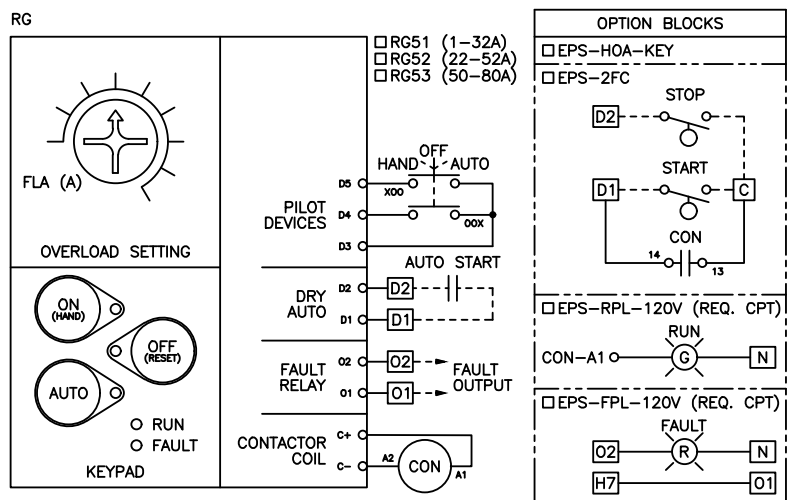
EPS-ECONOMY PUMP STARTER

WIRING DIAGRAM

NEMA 1

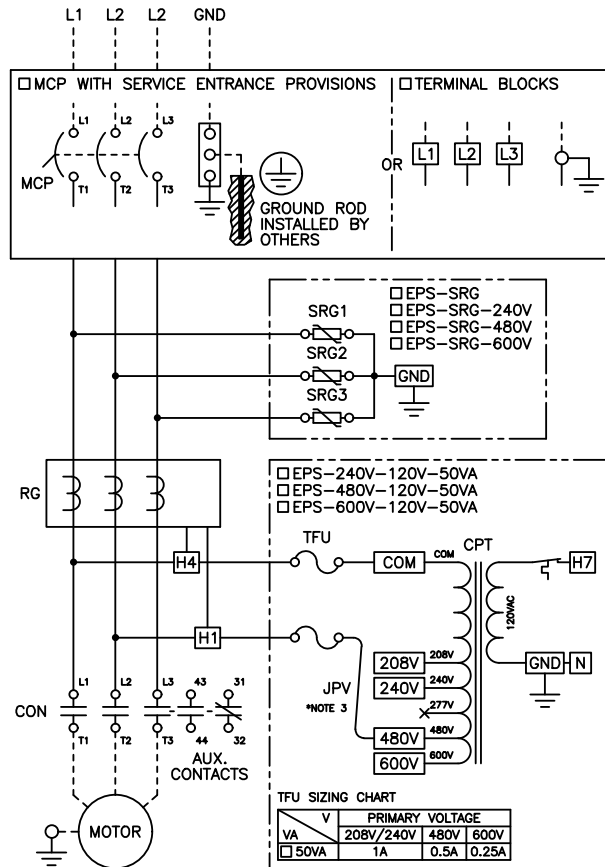


NEMA 3R



- NOTES
- DASHED LINES INDICATE FIELD WIRING.
 - CHECK BOX INDICATES A SELECTED OPTION.

SCHM-EPS1 REV1



- NOTES
- DASHED LINES INDICATE FIELD WIRING.
 - CHECK BOX INDICATES A SELECTED OPTION.
 - JUMPER JPV AND FUSES SET ACCORDING TO THE SELECTED OPTION. CUSTOMER IS RESPONSIBLE FOR PRIMARY SIDE FUSES IF JPV IS MOVED.

SCHM-EPS3R REV001

EPS-ECONOMY PUMP STARTER

SPECIFICATIONS

Starter Type		
Standard or combination (service entrance rated)		
NEMA Type 1 or 3R Enclosed		
User Interface		
Settings Adjustments	Internal	
Hand.Off.Auto	NEMA 3R - door mounted switch, NEMA 1 - Keypad	
Standard Control Operations		
Input	Auto Run	N.O. dry contact closure
Output	Fault Relay	N.O. 12-240 V
Operational	Overload Type	Electronic, I2T thermal trip curve
	Fault Reset	Manual
	Power Fail Modes	Selectable: return to off mode or return to last mode (Hand/Off/Auto)
Environmental		
Ambient Operating Temp	-5 °F to 140 °F (-20 °C to 60 °C)	
Ambient Storage Temp	-5 °F to 185 °F (-20 °C to 85 °C)	
Relative Humidity	5% to 95% non-condensing	
Motor Protection	Adjustment / Description	Default Setting
Overload Current Setting Range	Differs per model	Per SFA
Overload Trip Class	Class S (Submersible)	Always on
Current Phase Unbalance	Trips within 3 sec. @ 80% current unbalance.	Always On

