

Derwent
Top 100
Global
Innovator
2020



HVAC/PUMP Application **H100 BYPASS**

HVAC applications can be optimized with the new H100 Bypass. The Bypass series offers security with no downtime and energy savings using the H100 VFD.



Capacity

- 200V Class 5.5~18.5kW (7.5~25HP)
- 400V Class 5.5~55kW (7.5~75HP)



Features

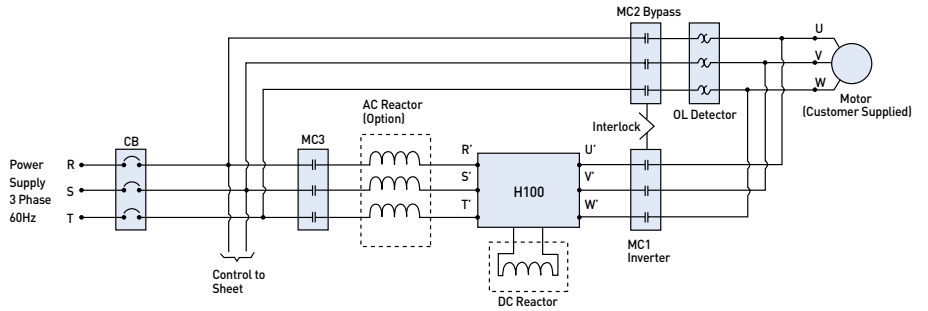
- Contactor Bypass
- HAND/OFF/AUTO selectable
- Compact Size
- Built-in AC/DC Reactor (Option)
- Easy Wiring and Installation
- Built-in Operation Indicator
- Auto Bypass Function
- Motor OL Trip Detection
- Easy Maintenance
- Built-in Bacnet, Metasys and Modbus Protocols
- NEMA 1 Enclosure
- KEB, Kinetic Energy Buffering
- Fire Mode
- Built-in Five Relay Outputs
- Real Time Clock



LS ELECTRIC

HVAC/PUMP Application

H100 Bypass



Block Diagram

Items	Name	Description
R, S, T	SP100 Line Power Input	3-phase AC line power supply to the adjustable frequency drive
U, V, W	SP100 Output to Motor	Regulated 3-phase output power to the motor
R', S', T'	Inverter Line Power Input	No additional wiring is required
U', V', W'	Inverter Output to Motor	No additional wiring is required
MC3	Input Contactor	Input Contactor for the inverter mode
MC2	Bypass Contactor	Bypass Contactor for the inverter mode
MC1	Output Contactor	Output Contactor for the inverter mode

Items	Name	Description
AC Reactor (Option)	AC Reactor	AC Reactor for the inverter mode
DC Reactor (Option)	DC Reactor	DC Reactor for the inverter mode
CB	Manual Motor Starters	Circuit breaker for the SP100 input connections
OL Detector	Thermal Overload Relays	Protects inverter from motor overload, open phase and restraint

Standard Specification

3-Phase 200V Class 5.5~18.5kW (7.5~25HP)

Model	0055	0075	0110	0150	0185	
Applied Motor	HP	7.5	10	15	20	25
	kW	5.5	7.5	11	15	18.5

3-Phase 400V Class 22~55kW (30~75HP)

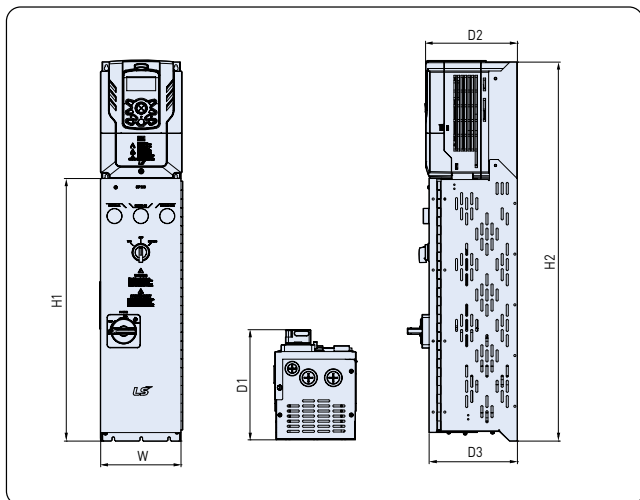
Model	0220	0300	0370	0450	0550	
Applied Motor	HP	30	40	50	60	75
	kW	22	30	37	45	55

3-Phase 400V Class 5.5~18.5kW (7.5~25HP)

Model	0055	0075	0110	0150	0185	
Applied Motor	HP	7.5	10	15	20	25
	kW	5.5	7.5	11	15	18.5

- The standard motor capacity is based on a standard 4-pole motor.
- The standard used for 200V inverters is based on a 220V supply voltage, and 400V inverters are based on a 460V supply voltage.
- The standard output current is limited based on the carrier frequency set at CON-04.

Dimension



[Units : mm(inches)]

Model	H1	H2	W	D1	D2	D3	
3-phase 200V Class	0055SP100-2	517.3 (20.36)	750.1 (29.53)	158.3 (6.23)	217.5 (8.56)	181 (7.13)	174 (6.85)
	0075SP100-2	684.3 (26.94)	998.7 (39.31)	197.7 (7.78)	260.8 (10.26)	224.8 (8.85)	217.7 (8.57)
	0110SP100-2	758.8 (29.87)	1132 (44.56)	237.7 (9.35)	287.8 (11.33)	253.2 (9.97)	244.7 (9.63)
	0150SP100-2	517.3 (20.36)	750.1 (29.53)	158.3 (6.23)	217.5 (8.56)	181 (7.13)	174 (6.85)
3-phase 400V Class	0075SP100-4	684.3 (26.94)	998.7 (39.31)	197.7 (7.78)	260.8 (10.26)	224.8 (8.85)	217.7 (8.57)
	0110SP100-4	758.8 (29.87)	1132 (44.56)	237.7 (9.35)	287.8 (11.33)	253.2 (9.97)	244.7 (9.63)
	0150SP100-4	912.2 (35.91)	1460 (57.48)	327 (12.87)	342 (13.46)	304 (11.97)	291 (11.45)
	0185SP100-4	517.3 (20.36)	750.1 (29.53)	158.3 (6.23)	217.5 (8.56)	181 (7.13)	174 (6.85)
	0220SP100-4	684.3 (26.94)	998.7 (39.31)	197.7 (7.78)	260.8 (10.26)	224.8 (8.85)	217.7 (8.57)
	0300SP100-4	758.8 (29.87)	1132 (44.56)	237.7 (9.35)	287.8 (11.33)	253.2 (9.97)	244.7 (9.63)
	0370SP100-4	912.2 (35.91)	1460 (57.48)	327 (12.87)	342 (13.46)	304 (11.97)	291 (11.45)
	0450SP100-4	517.3 (20.36)	750.1 (29.53)	158.3 (6.23)	217.5 (8.56)	181 (7.13)	174 (6.85)
0550SP100-4	684.3 (26.94)	998.7 (39.31)	197.7 (7.78)	260.8 (10.26)	224.8 (8.85)	217.7 (8.57)	



www.lselectric.com/USA

■ LS ELECTRIC USA Inc.
980 Woodlands Pkwy, Vernon Hills, IL 60061 USA
Tel : 1-800-891-2941 E-mail : sales.us@lselectric.com



• According to The WEEE Directive, please do not discard the device with your household waste.