SP600 AC Drives

RELIANCE ELECTRIC

Rockwell Automation

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F3
F4
ESC
PROG
JOG
Ready
COMM
Drive
MS
NET A
NET B
RELIANCE
ELECTRIC

SP600 AC Drives

Now Harsh Isn't So Tough

The Best in Industrial AC Drives Just Got Even Better

When the SP600 drive first debuted, it signaled the beginning of a totally new family of AC drives with the dependable Reliance brand name—drives that were destined to break new ground and set the standard by which others in their class would be measured.

Now the benchmark is raised with the introduction of a new offering of full-featured SP600 drives with both NEMA 4X/12 and IEC IP66 enclosure ratings. These tamper-proof, washdown and dust-tight drives can withstand a direct spray of water pressure up to 1,000 psi, and they are protected against dust particles as small as 75 microns.

RELIANCE ELECTRIC

Now Offered with NEMA 4X/12 & IEC IP 66 Enclosure ratings for Heavy-Duty Washdown & Dusty Environments

The New Benchmark of Drive Value.....Just G

SP600 DRIVES Meet Washdown/Dust-Tight Standards & Specifications

This compact, versatile, and cost-effective design incorporates all the advanced features, functionality, and "user friendliness" you would expect from the leader in drive performance and value. These advantages, along with the following ratings and certifications make this truly an exceptional product.

- NEMA Type 4X
- NEMA Type 12
- IEC IP66

Other certifications include:

- UL
- cUL
- NSF
- CE
- Ctick

Note: CE and Ctick not available on 575 volt drives

Deliver Performance with User-Friendliness

Reliance SP600 AC drives are offered with a 240 VAC drive rating from 0.5 to 10 HP and with 480 and 575 VAC drive ratings from 0.5 to 20 HP. Plus, every SP600 is software selectable for either volts/hertz or sensorless vector control, with a controllable speed range of up to 80:1

Each NEMA 4X drive has a built-in keypad with a LCD graphic display. The icon-based menu selection interface provides for "intuitive" setup and easy operation. As another added user benefit, the built-in keypad includes two new keys used exclusively for increase and decrease speed operation.

The LCD display on the NEMA 4X SP600 is protected from the environment by the front cover overlay. The light emitting diodes LED modules on the new SP600 drive cover provides a visual indication of network operations, without having to open the cover.

For local configuration, control, and monitoring, the NEMA 4X SP600 has a built-in washdown protected LCD Operator Interface Module (OIM). This multi-line display can be used for setup, display and monitoring of operating parameters and variables. This can be done in one of six-languages.

The membrane keypad offers a new feature in that the display keys are grouped separately from control keys. This can be done because of the addition of the exclusive speed increase and decrease operation keys. Another added feature is that all control keys "JOG, REVERSE, INCREASE and DECREASE SPEED, START and STOP" are double wide buttons for convenient operation.

Function keys on the SP600 drives are configurable for user-assigned operations, and the QuickStart configuration program walks you through setup, step-by-step. Remember, if you prefer setup from your computer, you may use the optional VS Utilities PC software to configure parameters or monitor your SP600 drive.

Simple, Fast & Familiar

Main Menu Icons allow access, through drop-down menus of subdirectories to all supported drive functions and supported devices.

Start Up Icon provides access to Quick Start utility that allows for fast, easy set-up involving as few as eight parameters.

Parameter Icon provides quick access to drive parameters via functional group, number or values changed from default settings.

Control Source Icon allows control and reference selection.

Diagnostics Icon provides information on faults and alarms.

Display Icon allows operators to configure the OIM for language, monitoring display, function keys and display configuration.

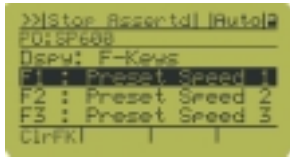
Memory Icon allows operators to load and save different parameter sets into the drive or to restore factory-set defaults.

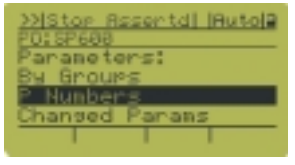
Device Select Icon allows operators to select the drive, network device or other peripheral for configuration.

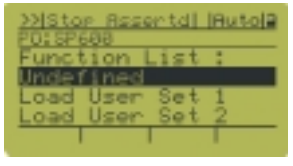
Password Icon provides protection against modification of parameters or selection of unauthorized parameter access levels.

GOT BETTER

Quick Start Utility, accessible from the Start Up Icon, provides operators with a set of the most commonly programmed parameters. With Quick Start self-prompting screens, the drive can be quickly and easily set up without in-depth knowledge of parameter structure.







Parameters, can be reviewed in factory defined groups, in numerical order, or by those which have changed from factory default values.

Function Keys provide configurable hotkey functionality for quick and easy drive configuration, set up and process operation. For configuration and set up, each of the four function keys provides access to factory-assigned operations. When operating, each function key provides a shortcut to operator-defined process operations such as preset speeds, auto/manual operation and fault log information. Each function key is allowed to have two user assigned functions allowing eight possible assignments, eliminating the need for hardwired pushbuttons and switches.

Drive Monitoring information can be reported on LCD OIM in terms of output frequency, motor amps, speed or voltage; or in operator-defined terms such as gallons-per-minute, cans-per-hour or bagels-per-minute. Units and text are definable by the user.

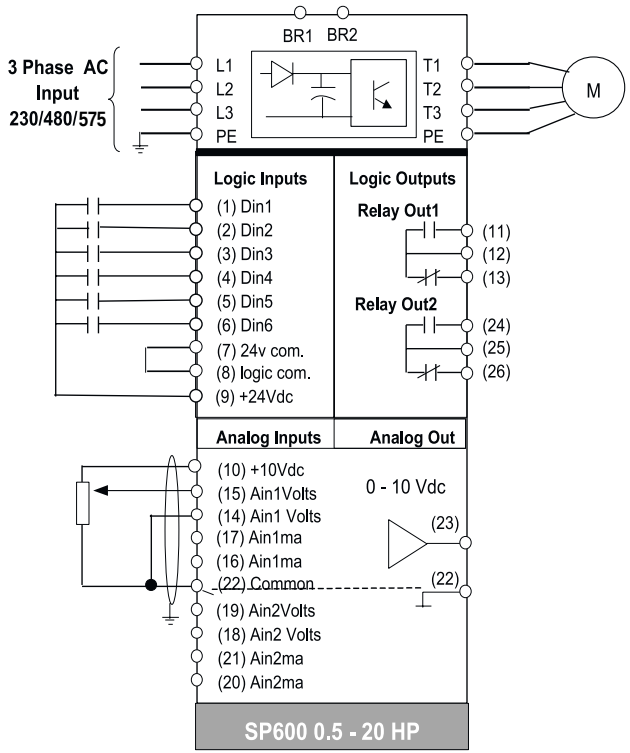
SP600 AC Drive...Washdown and I

Communication Options Share a Common Footprint for Simple Installation

A wide range of network options allow you to maximize both data access and drive control.

- ControlNet™
- DeviceNet™
- ProfiBus™
- InterBus-S™
- RS485 Modbus™
- RS485 DF1
- EtherNet/IP™

Typical Terminal Assignments



Equipped with Built-In 7th Transistor For Controlled Deceleration

All of the SP600 drives are also equipped with snubber (dynamic) braking, DC injection braking, and a built-in 7th transistor for controlling fast deceleration and high inertia loads. The optional drive-mounted resistor kit is ideally suited for controlling low inertia loads, plus it installs easily and saves space. For high inertia loads, as well as cycle applications, you can add an optional remote mount resistor.

Suitable for Wall or Machine Installations

The small compact footprint of the NEMA 4X SP600 product will allow for mounting into more and more machine applications. Reliance's new offering of the NEMA 4X SP600 drive will prove to be a versatile solution for a variety of tough environments.

DUST-TIGHT

SP600 NEMA 4X/12, IP66 AC DRIVE—200-240 VAC, 50/60 HZ. INPUT: RATING 0.5 TO 10 HP

Catalog Number	Model Number	EMC Filter	Horsepower		Drive Amps @ 240 VAC		
			110% OL	KW	Cont.	1 Min.	3 Sec.
6SP240P5	6SP24X-2P2CTNN	–	0.5	0.37	2.2	2.4	3.3
6SP24001	6SP24X-4P2CTNN	–	1	0.75	4.2	4.8	6.4
6SP24002	6SP24X-6P8CTNN	–	2	1.49	6.8	9	12
6SP24003	6SP24X-9P6CTNN	–	3	2.24	9.6	10.6	14.4
6SP24005	6SP24X-015CTAN	✔	5	3.73	15.3	17.4	23.2
6SP24007	6SP24X-022CTAN	✔	7.5	5.59	22	24.2	33
6SP24010	6SP24X-028CTAN	✔	10	7.46	28	33	44
	6SP24X-2P2CTAN	✔	0.5	0.37	2.2	2.4	3.3
	6SP24X-4P2CTAN	✔	1	0.75	4.2	4.8	6.4
	6SP24X-6P8CTAN	✔	2	1.49	6.8	9	12
	6SP24X-9P6CTAN	✔	3	2.24	9.6	10.6	14.4

SP600 NEMA 4X/12, IP66 AC DRIVE—380-480 VAC, 50/60 HZ. INPUT: RATING 0.5 TO 20 HP

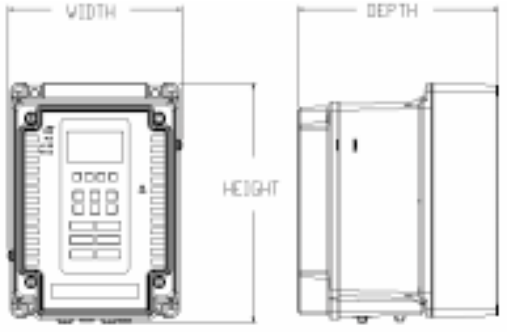
Catalog Number	Model Number	EMC Filter	Horsepower		Drive Amps @ 480 VAC		
			110% OL	KW	Cont.	1 Min.	3 Sec.
6SP440P5	6SP44X-1P1CTNN	–	0.5	0.37	1.1	1.2	1.6
6SP44001	6SP44X-2P1CTNN	–	1	0.75	2.1	2.4	3.2
6SP44002	6SP44X-3P4CTNN	–	2	1.49	3.4	4.5	6
6SP44003	6SP44X-005CTNN	–	3	2.24	5	5.5	7.5
6SP44005	6SP44X-008CTNN	–	5	3.73	8	8.8	12
6SP44007	6SP44X-011CTAN	✔	7.5	5.59	11	12.1	16.5
6SP44010	6SP44X-014CTAN	✔	10	7.46	14	16.5	22
6SP44015	6SP44X-022CTAN	✔	15	11.19	22	24.2	33
6SP44020	6SP44X-027CTAN	✔	20	14.92	27	33	44
	6SP44X-1P1CTAN	✔	0.5	0.37	1.1	1.2	1.6
	6SP44X-2P1CTAN	✔	1	0.75	2.1	2.4	3.2
	6SP44X-3P4CTAN	✔	2	1.49	3.4	4.5	6
	6SP44X-005CTAN	✔	3	2.24	5	5.5	7.5
	6SP44X-008CTAN	✔	5	3.73	8	8.8	12

SP600 NEMA 4X/12, IP66 AC DRIVE—575 VAC, 50/60 HZ. INPUT: RATING 0.5 TO 20 HP

Catalog Number	Model Number	EMC Filter	Horsepower		Drive Amps @ 575 VAC		
			110% OL	KW	Cont.	1 Min.	3 Sec.
6SP540P5	6SP54X-09PCTNN	–	0.5	0.37	0.9	1	1.4
6SP54001	6SP54X-1P7CTNN	–	1	0.75	1.7	2	2.6
6SP54002	6SP54X-2P7CTNN	–	2	1.49	2.7	3.6	4.8
6SP54003	6SP54X-3P9CTNN	–	3	2.24	3.9	4.3	5.8
6SP54005	6SP54X-6P1CTNN	–	5	3.73	6.1	6.7	9.1
6SP54007	6SP54X-9P0CTNN	–	7.5	5.59	9	9.9	13.5
6SP54010	6SP54X-011CTNN	–	10	7.46	11	13.5	18
6SP54015	6SP54X-017CTNN	–	15	11.19	17	18.8	25.5
6SP54020	6SP54X-022CTNN	–	20	14.92	22	25.5	34

SP600 NEMA 4X/12, FEATURES

SP600 NEMA 4X/12	Features
230V three phase	Fractional to 10HP
460V	Fractional to 20HP
575V	Fractional to 20HP
Overload rating	110% 1 minute
NEMA 4X/12	✔
IP66	✔
EMC Filtering	Internal
Internal DB Transistor	✔
Drive mounted Display	LCD
Scalable User Display	✔
Parameter R/W Password	✔
CopyCat function	VS Utilities
Control Type	Sensorless Vector / V/Hz
Preset Speeds	8
Skip Frequency	3 frequency bands
Flying Start	✔
Auto Restart	✔
PI Process Control Loop	✔
I/O	
Discrete Inputs	6 fully programmable 24V sink/source
Discrete Output	2 - N.O./N.C. dry contact
Analog Inputs	2 - Voltage or Current
Analog Output	0 to 10 Vdc
Communications	
DeviceNet	✔
EtherNet/IP	✔
Profibus	✔
ControlNet	✔
InterBus-S	✔
Modbus	✔



SP600 NEMA 4X/12, DIMENSIONS

SP600 NEMA 4X/12 200 - 240 VAC, 50/60 Hz			
HP	Width	Height	Depth
0.5 to 3.0	6.8 (172)	9.5 (240)	8.0 (203)
5.0 to 10	8.7 (220)	13.8 (350)	8.3 (211)
SP600 NEMA 4X/12 380 - 480 VAC, 50/60 Hz			
HP	Width	Height	Depth
0.5 to 5.0	6.8 (172)	9.5 (240)	8.0 (203)
7.5 to 20	8.7 (220)	13.8 (350)	8.3 (211)

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RAPS-957-1 4/03-20M-TL

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