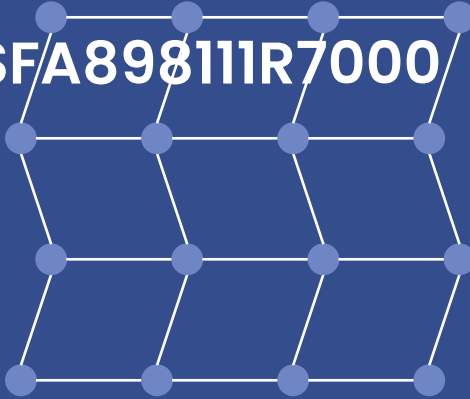


MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB PSTX170-600-70 1SFA898111R7000

Product Reference

ABB PSTX Advanced Three-Phase Motor Softstarter

**DOCUMENT SCOPE**

Independent Apter Power manual compiled only from the cited ABB manufacturer sources. No product photograph is included.

Product / lookup identity	ABB PSTX170-600-70 1SFA898111R7000
Reference number	PSTX170-600-70
Document basis	Published ABB product records, PDFs, and manuals listed on page 3

**Product page**

<https://www.apterpower.com/ABB/1sfa898111r7000-pstx170-600-70>
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Product role and published parameters

WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

ABB PSTX170-600-70, order code ISFA89811IR7000, is an advanced three-phase motor softstarter with integrated control, protection, monitoring and bypass functions. It controls motor acceleration and deceleration with voltage or torque ramps and current limiting, then closes its built-in bypass contactor at full speed to reduce heat and power loss. The unit evaluates motor current, line voltage, power, energy and...

Published field	Manufacturer-published value or verified identity note
Product family	PSTX advanced-range softstarter
Rated operational current, in-line	171 A
Adjustable motor-current range	51.3 to 171 A
Rated operational voltage for this 600 V variant	208 to 600 V AC, +10%/-15%, 50/60 Hz +/-10%
Motor power, in-line	45 kW at 220-230 V; 90 kW at 380-400 V; 110 kW at 500 V
Inside-delta rating	300 A; 90 kW at 220-230 V, 160 kW at 380-400 V, 200 kW at 500 V
Rated control-supply voltage	100 to 250 V AC, +10%/-15%, 50/60 Hz +/-10%

System function and signal path

01	Measured Or Derived Values: Motor current; Main voltage; Motor voltage; Main frequency; Active and reactive power; Active and reactive energy; Power factor; Motor and thyristor temperature...
02	Control Inputs: Start, stop, and three programmable digital inputs for functions documented by ABB, including reset, enable, jog, heating, braking, reversing logic, emergency mode and...
03	Outputs: Three programmable signal relays and one configurable analog output; fieldbus data is available through the documented communication interfaces.
04	Motor Control: Voltage-ramp or torque-ramp soft start/stop, current limiting, kick start, jog, dynamic braking, standstill brake and related application functions.

Applications, answers, and official sources

1 Pump systems: Torque control soft-starts and soft-stops pumps, underload protection can detect dry running, and the documented pump-cleaning function can reverse flow to clear pipes.

2 Fans and high-inertia loads: Controlled voltage/current during start reduces inrush, while dynamic and standstill braking functions support appropriately engineered fan applications.

3 Conveyors and material handling: Adjustable acceleration, current limiting and slow-speed jog in both directions support commissioning and controlled movement of compatible conveyor loads.

4 Compressors and general industrial motors: Soft starting and built-in protection reduce electrical and mechanical starting stress when the PSTX is selected to the motor current, duty and start frequency.

Frequently asked questions

What is ABB PSTX170-600-70?	It is an ABB PSTX advanced-range softstarter for controlling and protecting a three-phase motor during starting, running transition and stopping.
What is the exact ABB order code?	The exact order code for PSTX170-600-70 is ISFA898111R7000. The order code must be checked because the 600D and 690 V variants use different codes.
What is its rated operational current?	ABB specifies 171 A in-line, with an adjustable motor-current range of 51.3 to 171 A.
What motor power does ABB list at 400 V?	The ABB installation manual lists 90 kW at 380-400 V for in-line connection. Actual selection must still use the motor nameplate current and application duty.
Can PSTX170-600-70 be wired inside delta?	Yes. ABB lists a 300 A inside-delta rating for this size, but the wiring, motor leads, settings and protection must follow the PSTX manual.
Does it include a bypass contactor?	Yes. ABB states that the bypass contactor is built in and activates when the motor reaches full speed.

Official ABB sources

ABB product details - PSTX170-600-70	https://new.abb.com/products/ISFA898111R7000/pstx170-600-70
Softstarters Type PSTX30...PSTX1250 Installation and commissioning manual	https://library.e.abb.com/public/a5d884377e924e4b92e2f7093084a3ea/ISFC132081M0201_Rev_P.pdf
PSTX softstarter - The advanced range fact sheet	https://library.e.abb.com/public/ccc64fc56a934fdaa28e902df9c40fe3/PSTX_factsheet_ISFC132033L0201_revA.pdf
Softstarters PSR, PSRC, PSE and PSTX catalog	https://library.e.abb.com/public/79b4636491024f61a7945a3dbb28e256/SoftstarterCatalog_ISFC132012C0201_revJ.pdf