



TECHNICAL BROCHURE

BCPAQSTART R2

AquaStart[™] Combination Soft Starters

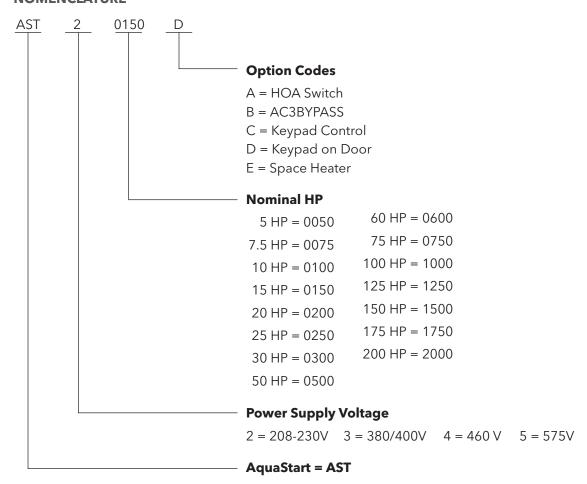
Residential Water Systems

FEATURES

- SSW-07 Combination Soft Starter
- Adjustable current, ramp time and voltage overloads
- Standard NEMA 4 outdoor rated enclosures
- cULus Certified, CE available as option.
- 5-175 HP at 230V, 10-200 HP at 460V, 15-200 HP at 575V
- Built-in fusible disconnect
- Optional keypad control available
- Standard, built-in AC1 Run Rated Bypass, between start and stop (automatically bypass SSW-07 between start and stop).
- AC3 Bypass Contactor and DOL selector switch as option (allows user to bypass SSW-07 for DOL start and stop).

- Wall-mounted enclosure Frames A-D
- Floor mount kit for Frame Size E
- Temperatures to 55°C without current derate
- 3 programmable inputs (120V)
- 2 relay outputs with NO contacts
- 240V, 11A programmable output
- Protection from:
 - Excess starting time
- Locked rotor
- Current imbalance
- Phase loss
- Over / under current
- Under voltage

NOMENCLATURE



COMBINATION SOFT STARTERS

AST20050 17 AST20075 24 AST20100 30 AST20150 45 AST20150 45 AST20250 61 AST20300 85 AST20500 130 AST20500 171 AST20500 171 AST20500 200 AST20500 255 AST21250 312 AST21500 365 AST21750 412 AST21500 177 AST40100 177 AST40100 177 AST40150 24 AST40300 45 AST40500 61 AST40500 61 AST40500 130 AST40500 171 AST40500 130 AST40500 200 AST41000 130 AST40500 130 AST40500 130 AST40500 200 AST40500 200 AST40500 200 AST40500 200 AST40500 200 AST40500 200 AST40500 30 AST40500 200 AST40500 200 AST40500 200 AST50500 45 AST50500 45 AST50500 45 AST50500 45 AST50500 171 AST50500 171 AST50500 200 AST51500 171 AST50500 45 AST51500 171 AST5000 85 AST51500 171 AST5000 200	CentriPro Order Number	Starter Amps*	Supply Voltage	Nominal HP*	Frame Size	Weight (lbs.)
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AST50300 30 AST50500 45 AST50750 61 AST51000 85 AST51250 130 AST51500 171 150 C 280	AST50150	17		15	А	140
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AST51250 130 125 C 280	AST50750	61	575	60/75		
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	AST51250	130		125		
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	AST52000	200		200		

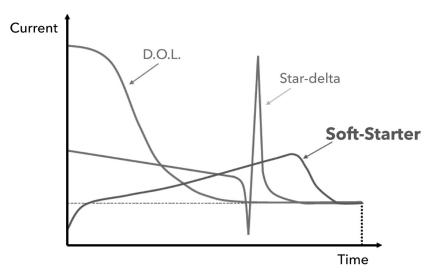
 $^{^{\}star}$ Horsepower values are for reference purposes only. Size soft starter by maximum amperage draw.

^{**} Power supply voltage acceptable range - (-15% to +10%)

The chart below shows the motor overload setting for standard models (Setting based upon Service Factor Amps).

			MOTOR CURRENT SETTING					
Supply Voltage	Model Number	Rated Amps	100%	90%	80%	70%	60%	50%
	AST20050	17	17	15.3	13.6	11.9	10.2	8.5
	AST20075	24	24	21.6	19.2	16.8	14.4	12.0
	AST20100	30	30	27.0	24.0	21.0	18.0	15.0
	AST20150	45	45	40.5	36.0	31.5	27.0	22.5
	AST20250	61	61	54.9	48.8	42.7	36.6	30.5
	AST20300	85	85	76.5	68.0	59.5	51.0	42.5
200V - 240V	AST20500	130	130	117.0	104.0	91.0	78.0	65.0
	AST20600	171	171	153.9	136.8	119.7	102.6	85.5
	AST20750	200	200	180.0	160.0	140.0	120.0	100.0
	AST21000	255	255	229.5	204.0	178.5	153.0	127.5
	AST21250	312	312	280.8	249.6	218.4	187.2	156.0
	AST21500	365	365	328.5	292.0	255.5	219.0	182.5
	AST21750	412	412	370.8	329.6	288.4	247.2	206.0
	AST40100	17	17	15.3	13.6	11.9	10.2	8.5
	AST40150	24	24	21.6	19.2	16.8	14.4	12.0
	AST40200	30	30	27.0	24.0	21.0	18.0	15.0
	AST40300	45	45	40.5	36.0	31.5	27.0	22.5
440\4 400\4	AST40500	61	61	54.9	48.8	42.7	36.6	30.5
460V - 480V	AST40750	85	85	76.5	68.0	59.5	51.0	42.5
	AST41000	130	130	117.0	104.0	91.0	78.0	65.0
	AST41250	171	171	153.9	136.8	119.7	102.6	85.5
	AST41500	200	200	180.0	160.0	140.0	120.0	100.0
	AST42000	255	255	229.5	204.0	178.5	153.0	127.5

AMP DRAW COMPARISON



D.O.L.

- High starting current
- High mechanical stresses

STAR-DELTA

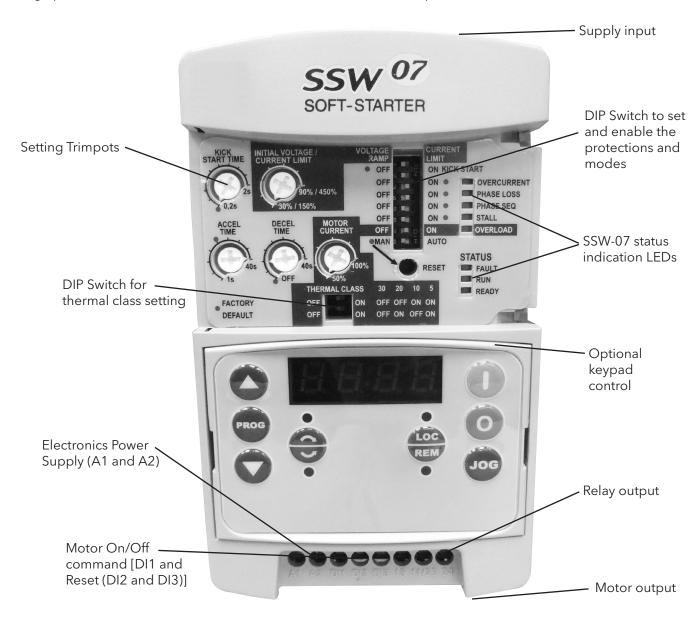
- 1/3 D.O.L. start current
- Current spikes at transition

AQUASTART™ SOFT STARTER

- Start and stop motor over time
- Prevents mechanical shocks on load
- Prevents current spikes in supply line

AQUASTART SOFT STARTER FEATURES

High performance Soft Starter that allows controlled starts of three phase, AC induction motors.

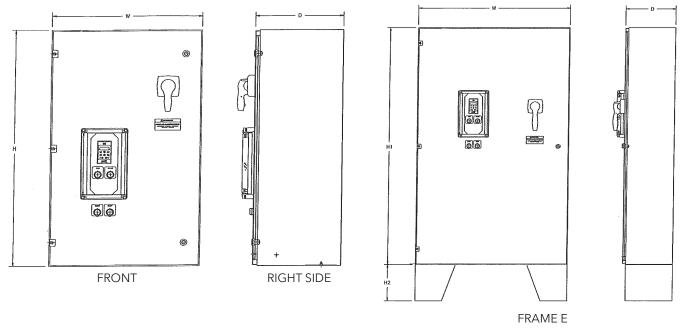


REPLACEMENT SOFT STARTER MODULES

XYLEM PART NUMBER	DESCRIPTION
SSW07XY0017T5SZ	17A Soft Start
SSW07XY0024T5SZ	24A Soft Start
SSW07XY0030T5SZ	30A Soft Start
SSW07XY0045T5SZ	45A Soft Start
SSW07XY0061T5SZ	61A Soft Start
SSW07XY0085T5SZ	85A Soft Start
SSW07XY0130T5SZ	130A Soft Start

XYLEM PART NUMBER	DESCRIPTION
SSW07XY0171T5SZ	171A Soft Start
SSW07XY0200T5SZ	200A Soft Start
SSW07XY0255T5SZ	255A Soft Start
SSW07XY0312T5SZ	312A Soft Start
SSW07XY0365T5SZ	365A Soft Start
SSW07XY0412T5SZ	412A Soft Start

AQUASTART DIMENSIONS



FRAMES A - D

FRAME	MOUNT	W	D	H1	H2
Α	Wall	16	8	24	N/A
В		24	12	32	N/A
С		24	14	40	N/A
D		32	12	48	N/A
E	Floor	36	12	60	12

NOTES

For all of your pump and control needs, contact your Goulds Water Technology Pump Professional.



Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com



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