

Digistart IS

The Intelligent Motor Start Solution

5 - 2000hp; 200 - 440V, 380 - 690V

DIGISTART

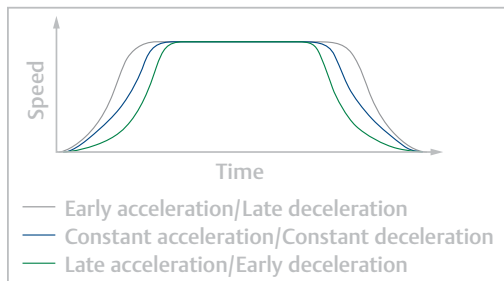


The Digistart IS is the first intelligent soft start solution to offer “Adaptive Control,” a new technology that provides an unprecedented level of control over acceleration and deceleration.

Flexible

Adjustable busbars on 360A units (no internal bypass models only) and higher can be configured in any combination of top/bottom power and motor connections to reduce cable costs and panel space requirements.

Adaptive Control — Industry-Leading Motor Start Control



This innovative control method controls motor current and acceleration allowing the user to select between early, constant or late acceleration/deceleration depending upon the application requirements. The system then monitors motor performance by analyzing each start and adjusting accordingly to maintain optimum control.

Best-In-Class Operator Interface

Intuitive, informative and easy-to-read LCD alphanumeric and graphing keypad provides the ultimate in ease of use with built-in wizards for easy commissioning, real-time performance monitoring and event logging. Other features include status LEDs, individual phase monitoring and multiple-language support.



RoHS
Compliant

DRIVE CENTRE 
Industrial Automation Systems Integrators

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Control Techniques

Ratings

Size	Duty	Normal		Medium	Heavy	Severe	Starts per Hour
	% FLA	300%		350%	400%	450%	
	Start Time	10 seconds		15 seconds	20 seconds	30 seconds	
Model	(hp @ 460V)	(A)	(A)	(A)	(A)	(A)	
1A	IS1x0023B	15	23	20	17	15	10
	IS1x0043B	30	43	37	31	26	
	IS1x0053B	40	53	53	46	37	
1B	IS1x0076B	60	76	64	55	47	6
	IS1x0097B	75	97	82	69	58	
	IS1x0105B	75	105	105	95	78	
2	IS2x0145B	100	145	123	106	90	6
	IS2x0170B	125	170	145	121	97	
	IS2x0220B	150	220	210	178	148	
3	IS3x0255B	200	255	231	201	176	6
	IS3x0350B	300	350	306	266	230	
	IS3x0425B	350	425	371	321	276	
4	IS4x0500B	400	500	445	383	326	6
	IS4x0700B	600	700	592	512	438	
	IS4x0820B	700	820	705	606	516	
	IS4x0920B	800	920	804	684	571	
	IS4x1000B	900	1000	936	796	664	
No Internal Bypass*							
3	IS3x0255N	200	255	231	201	176	6
4	IS460360N	300	360	360	310	263	6
	IS460430N	350	430	430	368	309	
	IS460650N	500	650	650	561	455	
	IS460790N	700	790	790	714	579	
5	IS460930N	800	930	930	829	661	6
	IS561200N	1000	1200	1200	1200	1071	
	IS561410N	1250	1410	1410	1319	1114	
	IS561600N	1400	1600	1600	1600	1353	

Notes: x=4 for 200 to 440Vac, 6 for 380 to 690Vac

B=internal bypass, N=no internal bypass

*Ratings for No Internal Bypass only valid for installations with external bypass contactor

Options

Order Code	Description
IS-KEYPAD-MOUNT	Allows keypad to be remote-mounted up to 3m from soft starter; when panel-mounted, keypad is IP65 rated
IS-FINGER-GUARD	Provides IP20 protection for models IS2x0145B to IS2x0220B
IS-I/O	Provides additional 2 x digital inputs, 3 x relay outputs, 1 x analog input and 1 x analog output
IS-RTD-&-GND-FAULT	The RTD (resistive temperature device) and GND (ground fault protection) card provides additional 6 x PT100 RTD inputs and 1 x ground fault input
Fieldbus Order Code	Description
DIGISTART-MODBUS	Modbus RTU Interface for Digistart IS and Digistart CS
DIGISTART-PROFIBUS	PROFIBUS Interface for Digistart IS and Digistart CS
DIGISTART-DEVICENET	DeviceNet Interface for Digistart IS and Digistart CS
DIGISTART-USB	USB Interface for Digistart IS and Digistart CS

Dimensions

Size	Height (H)	Width (W)	Depth (D)	Weight
1A	11.6in (294.6mm)	6.2in (156.4mm)	7.7in (196mm)	7.1lbs (3.2kg)
1B	11.6in (294.6mm)	6.2in (156.4mm)	8.9in (226mm)	10.6lbs (4.8kg) max
2	17.2in (438mm)	11.1in (282mm)	10.0in (254mm)	35.3lbs (16kg)
3	18.1in (460mm)	15.5in (394mm)	11.2in (284mm)	55.1lbs (25kg)
4	27.3in* (694mm*)	16.9in (430mm)	11.9in (302mm)	118lbs (53.5kg) max
5	34.8in* (884mm*)	22.6in (574mm)	14.3in (364mm)	309lbs (140kg)
Fieldbus Option Dimensions				
	6.2in (157.5mm)	1.4in (35.6mm)	3.5in (88.9mm)	0.6lbs (0.3kg)

*Maximum height inclusive of busbar

Specifications

Start Modes	
Constant Current/Current Limit, Current Ramp, Adaptive and Kickstart	
Stop Modes	
Coast To Stop, TVR Soft Stop, Adaptive, DC brake	
General	
Current Range	23 to 1600A (nominal)
Motor Connection	In-line or inside delta
Bypass	Integrated internal or external
Supply	
Voltage - ISx4xxxx	200 to 440Vac (±10%)
Voltage - ISx6xxxx	380 to 690Vac (±10%)
Control Voltage	110 to 210Vac (+10% / -15%) or 220 to 440Vac (+10% / -15%)
Supply Frequency	45 to 66Hz
Inputs	
Inputs	Active 24Vdc, 8mA approx
Start	Normally open
Stop	Normally closed
Reset	Normally open or closed
Programmable Inputs	
Input A	Normally open or closed
Input B	Normally open or closed
Motor Thermistor	
RTD/PT100	
Outputs	
Relay outputs	10A at 250Vac resistive 5A at 250Vac, AC15 pf 0.3
Run Relay	Normally Open
Programmable Outputs	
Relay A	Normally open
Relay B	Changeover
Relay C	Changeover
Analog Output	0-20 or 4-20mA
24 Vdc Output	
Environmental	
RoHS Compliant	Standard
Protection	
IS1x0023B to IS1x0105B	IP20
IS2x0145B to IS5x1600N	IP00
Operating Temperature	14 to 104 °F (-10 to 40°C), max 140 °F (60 °C) with derating
Storage Temperature	-13 to 140°F (-25 to 60°C)
Humidity	5 to 95% relative
Conformal Coating	Standard

