

# ISA-DS LOW VOLTAGE SOFT STARTERS



Digital soft starter with a built-in bypass

## Igel Elektronik GmbH

Industrieweg 13–15 | 48324 Sendenhorst  
Germany

Fon: +49 (0) 25 26 93 89-0

Fax: +49 (0) 25 26 93 89-22

E-Mail: [info@igelelektronik.de](mailto:info@igelelektronik.de)

[www.igelelektronik.de](http://www.igelelektronik.de)

[www.softstarter.eu](http://www.softstarter.eu)



**ADVANTAGES AT A GLANCE**

- | Superior starting and stopping characteristics
- | Comprehensive motor protection package
- | Easy commissioning
- | Fully equipped starters
- | Small foot print
- | Third generation microprocessor based design
- | Built-in bypass
- | RS 485 Communication
- | Frequency autotracking: 45–65 Hz
- | Unique optional features including: Analogue output and additional enhancements

**APPLICATIONS**

**Marine and Offshore**

- | Complete line 8–3500A, 220–1000V
- | Heavy duty, fully rated design
- | Robust construction
- | Generator ready – auto frequency tracking, enables motor starting at 45–65 Hz
- | User friendly operation
- | Unique protection for corrosive environments

**Industrial applications**

- | Pumps
- | Hydraulic systems
- | Fans and blowers
- | Compressors
- | Conveyors

**1000 V for mining applications**

- | Pumps
- | Blowers
- | Conveyors

**Range 8–3500A and 200–1000V**



LOW V.  
SOFT  
STARTERS



**DISPLAYS (LED'S)**

- | LCD – 2 lines of 16 characters each
- | Selectable languages – english, german, french and spanish
- | 4 LEDs – On, Run, Ramp up/down and fault
- | Statistical data: start, stop and fault parameters
- | Full script parameter settings

**MOTOR AND STARTER PROTECTION**

- | Too many starts
- | Shear Pin (start, run, jam)
- | Electronic overload with selectable curves
- | Under current
- | Phase loss and phase sequence
- | Under, over and no voltage
- | Load loss (motor not connected)
- | Thyristor bypass
- | Starter over-temperature
- | External fault (input programmable)
- | Thyristor protection by varistors

**STARTING AND STOPPING**

- | Soft start and soft stop
- | Current limit
- | Pump control program
- | Torque and Current Control for optimized starting and stopping process
- | Dual adjustments – two starting and stopping characteristics
- | Pulse start
- | Slow speed with electronic reversing

**CONTROLS**

- | Opto isolated inputs
- | Auxiliary relays: fault, end of acceleration or immediate (programmable)
- | Local and remote reset
- | RS 485 Modbus Communications for full control, display and programming
- | Future enhancements: analogue I/O card with thermistor input

KW at 400V	Starter Type (A)	Dimensions (mm)			Weight (kg)
		W	H	D	
4	ISA-DS 8	120	232	122	3,1
7,5	ISA-DS 17	120	232	122	3,1
15	ISA-DS 31	120	232	122	3,1
22	ISA-DS 44	120	232	122	3,1
30	ISA-DS 58	129	275	182	5,3
37	ISA-DS 72	129	275	182	5,3
45	ISA-DS 85	129	380	182	8,6
55	ISA-DS 105	129	380	182	8,6
75	ISA-DS 145	172	380	192	11,7
90	ISA-DS 170	172	380	192	11,7
110	ISA-DS 210	380	455	295	30,2
160	ISA-DS 310	380	455	295	30,2
200	ISA-DS 390	350	550	310	31
250	ISA-DS 460	460	600	318	65
315	ISA-DS 580	460	643	318	65
350	ISA-DS 650	460	643	318	65
450	ISA-DS 820	460	643	318	65
525	ISA-DS 950	560	833	334	170
630	ISA-DS 1100	560	833	334	170

**OPTIONS**

- | RS 485 Communication
- | Analogue output
- | Thermistor input
- | Special anti-corrosive treatment – special coating for harsh environments
- | Remote display
- | Ex-approvals and certifications

