



Main characteristics

Environment

Protection: D3-1x-0023/0105 IP 20
D3-1x-0145/1600 IP 00

Operating temperature: -10 to +60°C
(derating above 40°C)

Storage temperature: -25 to +60°C

Operating altitude: 0-1000 m

(derating above 1000 m)

Relative humidity: 5 to 95%

Degree of pollution (IEC 60 664-1): 3

Vibration: IEC 60068-2-6

Frequency: 45 to 66 Hz

Power supply separate from the control electronics: 110 to 210 VAC or 220 to 440 VAC

5 remote control inputs: 24 Vdc, 8 mA

- Run: NO
- Stop: NC
- Others: NO or NC

4 relay outputs: 250 VAC resistive, 10 A

Analogue output: 0-20 mA or 4-20 mA

24 Vdc output: 200 mA

7 additional inputs/outputs with add-on module

IEC 60947-4-2 standard coding

255A: AC-53a 3-10: 50-6

Rated current (A) _____

Starting current/full-load current ratio _____

Starting time (s) _____

On-load operating factor (%) _____

Number of starts per hour _____

97A: AC-53b 3.0-10: 590

Rated current (A) _____

Starting current/full-load current ratio _____

Starting time (s) _____

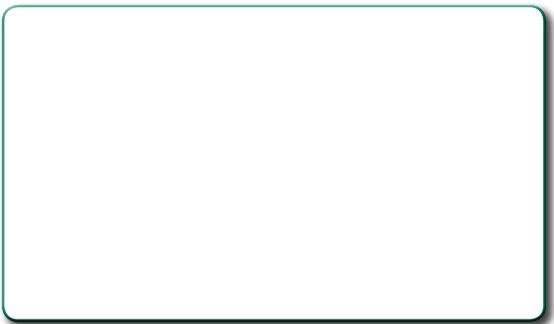
Interval between 2 starts (s) _____

Type	Dimensions (mm)			Weight (kg)
	W	H	D	
D3-1x-0023/0043/0053			196.2	3.2
D3-1x-0076	156.4	294.6	226.7	3.5
D3-1x-0097/0105				4.8
D3-1x-0145/0170/0200/0220	282	438	254	16
D3-1x-0255	394	460	284	25
D3-1x-0360/0430	430	556	302	50.5
D3-1x-0650/0790/0930				53.5
D3-16-1200/1410/1600	574	750	364	140



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DIGISTART 
Electronic starters
23 to 1600 A

EMERSON
Industrial Automation

DIGISTART D3

Simple, economical and high-performance!

LEROY-SOMER offers the latest electronic control technologies for managing transient phases in pumps, compressors, fans, conveyors, kneaders, grinders, etc. The DIGISTART D3 range, for induction motors up to 1600 kW, combines simplicity and user-friendliness while offering the user a high-performance, communicating electronic starter, and can achieve substantial energy savings.

Range: 23 - 1600 A/400 V or 690 V



Immediate access to information

- Settings, values & units
- Operating data
- Trips and diagnostics
- Multilingual (English, French, German, Italian, Spanish)

Quick and easy to use

- Keys for intuitive browsing
- Local controls
- Customisable function keys



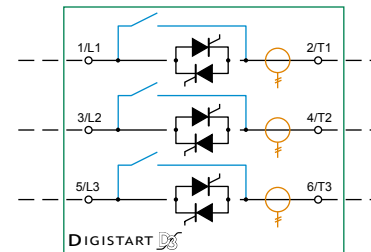
RoHS
Compliant



Integrated by-pass*

Up to 60% space saving:

- Elimination of external power components
- Simplified remote control wiring
- Energy saving



* : Integrated as standard up to 220 A. Higher ratings: a connection is provided for an external contactor (not supplied).

Maximum service!

Advanced control

- Starting and stopping adapt to the load automatically
- Automatic parameter optimisation by gradually learning the types of start
- Special deceleration curve for pumping applications which derives from more than 15 years of LEROY-SOMER's experience and expertise

High availability

- Able to operate with only two power components operational
- Protection devices can be disabled to implement forced run mode (smoke extraction, fire pump, etc.)

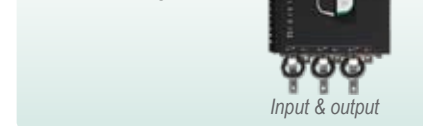
Total protection

- Continuous thermal modelling for maximum motor protection (even in the event of a power cut)
- Trips on configurable power thresholds
- Control of phase current imbalance
- Monitoring of motor temperatures and the environment with PTC or PT 100
- Optional
- Installation trips in the event of an earth fault
- Protection against mains over- and undervoltages

Flexible, ergonomic wiring

- Power ¹

Initial configuration



Other configurations



1: as standard from 360 rating upwards

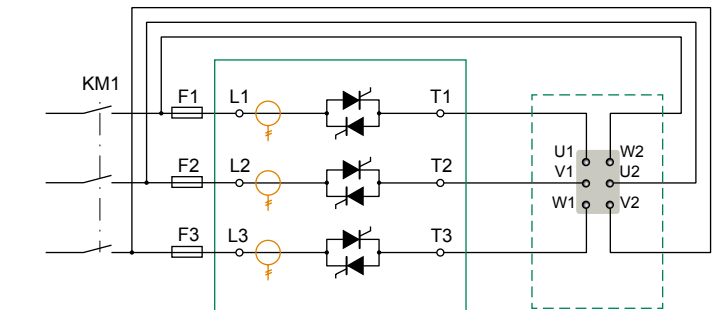
- Control



Removable terminal blocks

Connection to "Δ" motor (6-wire)

- Starter size at least one rating lower
- Automatic detection of motor connection
- Ideal for replacing Y / Δ starters



User-friendly

Communication

- Modbus RTU, DeviceNet, Profibus, USB

Simplicity of setup

- 3 parameter-setting levels
 - Preset configurations for pumps, fans, compressors, etc.
 - Standard: access to the main parameters
 - Advanced menu: access to all data
- Storage
 - Time-stamped log of trips
 - Energy consumption and operating conditions
 - Latest modifications
- Simulate operation by forcing control
- Display the state of the inputs/outputs
- Counters: running time, number of starts, etc.

