Digistart D3

Electronic starters
power from 23 to 1600 A

LEROY-SOMER™

Nidec
All for dreams
DIGISTART D3
high-performance!

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, Spanish, Italian)

Quick and easy to use
- Keys for intuitive browsing
- Local controls
- Customisable function keys

Integrated by-pass*
Up to 60 % space saving:
- Elimination of external power components
- Simplified remote control wiring
- Energy saving

* Available up to 1000 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

High flexibility
- Able to operate with only two power components operational
- Protection devices can be disabled to implement emergency run mode (smoke extraction, fire pump, etc.). Function validated by an European body

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
- Power connection protection kit for 145 to 1000 A models with integrated by-pass

Flexibe, ergonomic wiring
- Power
  - Examples of configurations 360 A to 1600 A

- Control
  - Removable terminal blocks
DIGISTART D3
simple and economical!
**Connection to «Δ» motor (6-wire)**
- Starter size at least one rating lower
- Automatic detection of motor connection
- Ideal for replacing Y / Δ starters

![Connection Diagram]

**User-friendly**

**Communication**
- Modbus RTU, DeviceNet, Profibus, USB
- Ethernet/IP, Modbus TCP, Profinet

**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.
DIGISTART D3 compact!

- **Designation**
  - DIGISTART type
  - Supply voltage: x=4, 200-440 VAC; x=6, 380-690* VAC
  - Rated current (A)
  - Version: B, with by-pass; N, without by-pass
  - * In IT regime network, from 600 to 690 V, it is necessary to protect the controller against transient overvoltages

- **IEC 60947-4-2 standard coding**
  - Rated current (A)
  - Starting current / full-load current ratio
  - Starting time (s)
  - On-load operating factor (%)
  - Number of starts per hour

- **Environment**
  - Protection: D3-1x-0023 / 0105 IP 20
  - Optional protection of power connections
  - Operating temperature: -10°C to +60°C (derating above 40°C)
  - Storage temperature: -25°C to +60°C
  - Operating altitude: 0 - 1000 m
  - Relative humidity: 5 to 95 %
  - Degree of pollution (IEC 60 664-1): 3
  - Vibration (D3-1x-0023 / 0220): IEC 600068-2-6

- **General informations**
  - 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:
    - Run: 24 VDC, 8mA
    - Stop: NO
    - Others: NO or NF
  - 4 replay 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
### Examples of DIGISTART/4-p motor combinations

<table>
<thead>
<tr>
<th>Motor</th>
<th>DIGISTART&lt;sup&gt;*&lt;/sup&gt;</th>
<th>B (with By-pass)</th>
<th>N (without By-pass)</th>
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<tbody>
<tr>
<td>7.5 - 11</td>
<td>AC53b 3.0-10:350</td>
<td>D3-1x-0023</td>
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<tr>
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<td>590</td>
<td>D3-1x-0043</td>
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<sup>*</sup> Selection for operation in by-pass mode, ambient temperature of 40°C, altitude < 1000m.

For other operating conditions: see installation manual or consult Leroy-Somer.

### Dimensions

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<tr>
<th>Type</th>
<th>L</th>
<th>Hmax.</th>
<th>P</th>
<th>Weight</th>
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