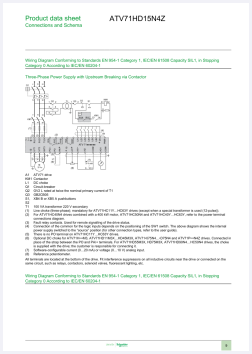
FIELD INSTALLATION QUICK GUIDE

# Installation Instructions

ATV71HD15N4Z

15 kW three-phase variable-speed drive


Product data sheet ATV71HD15N4Z
Connections and Schema

| | |
|---|---|
| PRODUCT | ATV71HD15N4Z |
| FAMILY | Altivar 71 |
| FUNCTION | 15 kW three-phase variable-speed drive |
| STATUS | Verify exact installed equipment |

Prepared by Amikon Limited from Schneider Electric documentation. This guide supplements the complete manufacturer manual and site procedure.

## 01 CONFIRM THE ORDERED CONFIGURATION

| | |
|---|---|
| Motor power | 15 kW / 20 hp |
| Supply arrangement | Three-phase |
| Rated supply voltage | 380-480 V AC, -15%/+10% |
| Supply frequency | 50-60 Hz, -5%/+5% |
| Line current | 48 A at 380 V; 39 A at 480 V |
| Apparent power | 31.6 kVA at 380 V |

## 02 PREPARATION AND CONNECTION

- Mount the drive vertically, away from heating elements.
- Maintain the documented clearances and bottom-to-top cooling airflow.
- Use the mounting drawing for the actual option-card configuration.
- Use the applicable power and control connection diagram; verify protective earth.

03

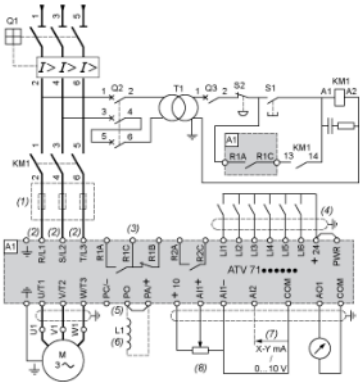
# OFFICIAL INSTALLATION REFERENCE

## Product data sheet
Connections and Schema

ATV71HD15N4Z

### Wiring Diagram Conforming to Standards EN 954-1 Category 1, IEC/EN 61508 Capacity SIL1, in Stopping Category 0 According to IEC/EN 60204-1

Three-Phase Power Supply with Upstream Breaking via Contactor




A1 ATV71 drive
KM1 Contactor
L1 DC choke
Q1 Circuit-breaker
Q2 GV2 L rated at twice the nominal primary current of T1
Q3 GB2CB05
S1, XB4 B or XB5 A pushbuttons
S2
T1 100 VA transformer 220 V secondary
(1) Line choke (three-phase); mandatory for ATV71HC11Y…HC63Y drives (except when a special transformer is used (12-pulse)).
(2) For ATV71HC40N4 drives combined with a 400 kW motor, ATV71HC50N4 and ATV71HC40Y…HC63Y, refer to the power terminal connections diagram.
(3) Fault relay contacts. Used for remote signalling of the drive status.
(4) Connection of the common for the logic inputs depends on the positioning of the SW1 switch. The above diagram shows the internal power supply switched to the “source” position (for other connection types, refer to the user guide).
(5) There is no PO terminal on ATV71HC11Y…HC63Y drives.
(6) Optional DC choke for ATV71H•••M3, ATV71HD11M3X…HD45M3X, ATV71•075N4…•D75N4 and ATV71P•••N4Z drives. Connected in place of the strap between the PO and PA/+ terminals. For ATV71HD55M3X, HD75M3X, ATV71HD90N4…HC50N4 drives, the choke is supplied with the drive; the customer is responsible for connecting it.
(7) Software-configurable current (0…20 mA) or voltage (0…10 V) analog input.
(8) Reference potentiometer.

All terminals are located at the bottom of the drive. Fit interference suppressors on all inductive circuits near the drive or connected on the same circuit, such as relays, contactors, solenoid valves, fluorescent lighting, etc.

### Wiring Diagram Conforming to Standards EN 954-1 Category 1, IEC/EN 61508 Capacity SIL1, in Stopping Category 0 According to IEC/EN 60204-1



Official manufacturer page reproduced at its original aspect ratio.

## 04 COMMISSIONING CHECKS

| | |
|---|---|
| 01 | Confirm ATV71HD15N4Z, supply class and motor rating. |
| 02 | Verify vertical mounting and the required cooling path. |
| 03 | Check option-card depth and enclosure clearance. |
| 04 | Check supply, motor and protective-earth connections. |
| 05 | Restore validated motor data, I/O assignments and communication settings. |
| 06 | Complete the manufacturer startup and protective-function checks. |

## 05 CONTROLLED DOCUMENT

| | |
|---|---|
| Official source | Schneider Electric ATV71HD15N4Z Product Data Sheet, 9 August 2019; characteristics and mounting/connection drawings. |
| Product record | ATV71HD15N4Z |
| Manufacturer | Schneider Electric |
| Warranty | 12 months from AMIKON |
| Support | INFO@AMIKON.CN |

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