Produktdatablad

Spesifikasjoner

ATV61 690V 110kW mEMC IP20

ATV61HC11Y

Utgikk: 23. jan. 2021

EAN: 3389119215039

Utgått

Teknisk informasjon

Produktspekter	Altivar 61
Produkt Eller Type Komponent	Frekvensomformer
Produktspesifikk Applikasjon	Pumpe- og ventileringsmaskin
Type Komponent	ATV61
Motoreffekt Kw	110 kW, 3 faser på 690 V 90 kW, 3 faser på 500 V
Motoreffekt Hk	125 hp, 3 faser på 575 V
Power Supply Voltage	500...690 V - 15...10 %
Supply Number Of Phases	3 faser
Nettstrøm	113 A for 600 V 3 faser 90 kW / 125 hp 117 A for 690 V 3 faser 90 kW / 125 hp 128 A for 500 V 3 faser 90 kW / 125 hp
Emc Filter	Nivå 3 EMC filter
Monteringsmåte	Med kjølelegeme
Maximum Prospective Line Isc	22 kA for 3 faser
Maksimale Transient Strøm	163,2 A for 60 s, 3 faser
Nominell Svitsjefrekvens	2,5 kHz
Switching Frequency	2.5...4.9 kHz Justrbar 2.5...4.9 kHz med belastningsfaktor
Asynchronous Motor Control	Fluks vektor kontroll uten sensor, standard Spennings- / frekvensforhold - Energy Saving, kvadratisk U / f Spennings- / frekvensforhold, 2 poeng Spennings- / frekvensforhold, 5 poeng
Synkronmotor Kontroll	Vector control without sensor, standard
Kommunikasjonsport Protokoll	CANopen Modbus
Polarisasjonstype	Ingen impedans for Modbus

Funksjonskort	Kommunikasjon kort for APOGEE FLN Kommunikasjon kort for BACnet Kommunikasjon kort for CC-Link Controller inside programmable card Kommunikasjon kort for DeviceNet Kommunikasjon kort for EtherNet/IP Kommunikasjon kort for Fipio I/O utvidelses kort Kommunikasjon kort for Interbus-S Kommunikasjon kort for LonWorks Kommunikasjon kort for METASYS N2 Kommunikasjon kort for Modbus Plus Kommunikasjon kort for Modbus TCP Kommunikasjon kort for Modbus/Uni-Telway Multi-pump card Kommunikasjon kort for Profibus DP Kommunikasjon kort for Profibus DP V1

Komplementær

Produsert I	Asynkrone motorer Synchronous motors
Power Supply Voltage Limits	425…759 V
Power Supply Frequency	50...60 Hz - 5...5 %
Power Supply Frequency Limits	47.5...63 Hz
Nominell Utgangsstrøm	125 A på 2,5 kHz, 575 V - 3 faser 125 A på 2,5 kHz, 690 V - 3 faser 136 A på 2,5 kHz, 500 V - 3 faser
Utgangsfrekvens	0,1…500 Hz
Hastighetsområde	1…100 i åpen sløyfe-modus, uten turtalls tilbakemeldinger
Hastighet Nøyaktighet	+/- 10 % of nominal slip 0.2 Tn to Tn uten turtalls tilbakemeldinger
Dreiemoment Nøyaktighet	+/- 15 % i åpen sløyfe-modus, uten turtalls tilbakemeldinger
Forbigående Overbelastning (Vridmoment)	130 % av nominell motormoment +/- 10 % for 60 s
Bremsemoment	<= 125 % med bremsemotstand 30 % uten bremsemotstand
Reguleringssløyfe	Frequency PI regulator
Motor Slip Kompensasjon	Can be suppressed Automatic whatever the load Not available in voltage/frequency ratio (2 or 5 points) Justrbar
Diagnostic	Drive voltage: 1 LED (rød)
Utgangsspenning	<= strømforsyningsspenning
Electrical Isolation	Between power and control terminals
Type Of Cable For Mounting In An Enclosure	With an IP21 or an IP31 kit: 3 ledning(er)IEC kabel på 40 °C, kobber 70 ° C / PVC With UL Type 1 kit: 3 ledning(er)UL 508 kabel på 40 °C, kobber 75 ° C / PVC Without mounting kit: 1 ledning(er)IEC kabel på 45 °C, kobber 70 ° C / PVC Without mounting kit: 1 ledning(er)IEC kabel på 45 °C, kobber 90 ° C / XLPE/EPR
Elektrisk Tilkobling	Klemme 2.5 mm2 / AWG 14 (AI1-/AI1+, AI2, AO1, R1A, R1B, R1C, R2A, R2B, LI1...LI6, PWR) Klemme 2 x 120 mm² / 2 x 250 kcmil (L1/R, L2/S, L3/T, U/T1, V/T2, W/T3) Klemme 120 mm² / 250 kcmil (PA, PB) Klemme 2 x 120 mm² / 2 x 250 kcmil (PC/-, PA/+)
Tiltrekkningsmoment	0,6 N.m (AI1-/AI1+, AI2, AO1, R1A, R1B, R1C, R2A, R2B, LI1...LI6, PWR) 24 N.m, 212 lb.in (L1/R, L2/S, L3/T, U/T1, V/T2, W/T3) 24 N.m, 212 lb.in (PA, PB) 24 N.m, 212 lb.in (PC/-, PA/+)

Forsyning	Internal supply for reference potentiometer (1 to 10 kOhm): 10.5 V DC, +/- 5 %, <10 mA med overspenning og kortslutnings beskyttelse Internal supply: 24 V DC (21…27 V), <200 mA med overspenning og kortslutnings beskyttelse Ekstern tilførsel: 24 V DC (19…30 V)
Antall Analoge Innganger	2
Analogue Input Type	AI1-/AI1+ bipolar differensiell spenning: +/- 10 V DC 24 V max, oppløsning 11 bits + sign AI2 programvare-konfigurerbar strøm: 0...20 mA, impedans: 242 Ohm, oppløsning 11 bits AI2 programvare-konfigurerbar spenning: 0...10 V DC 24 V max, impedans: 30000 Ohm, oppløsning 11 bits
Sampling Time	2 ms +/- 0.5 ms (AI1-/AI1+) - analog inngang 2 ms +/- 0.5 ms (AI2) - analog inngang 2 ms +/- 0.5 ms (AO1) - analog utgang 2 ms +/- 0.5 ms (LI1...LI5) - discrete input 2 ms +/- 0.5 ms (LI6)hvis konfigurert som logisk inngang - discrete input
Absolute Accuracy Precision	+/- 0.6 % (AI1-/AI1+) ved en temperaturendring 60 ° C +/- 0.6 % (AI2) ved en temperaturendring 60 ° C +/- 1 % (AO1) ved en temperaturendring 60 ° C
Lineær Feil	+/- 0.15 % of maksimal verdi (AI1-/AI1+) +/- 0.15 % of maksimal verdi (AI2) +/- 0.2 % (AO1)
Analog Utgangsnummer	1
Analog Utgangstype	AO1 programvare-konfigurerbar strøm, analog output utvalg 0...20 mA, impedans: 500 Ohm, oppløsning 10 bits AO1 programvare-konfigurerbar spenning, analog output utvalg 0...10 V DC, impedans: 470 Ohm, oppløsning 10 bits AO1 programvare-konfigurerbar logisk utgang 10 V, 20 mA
Antall Digitale Utganger	2
Digitale Utganger	Konfigurerbar relé logikk: (R1A, R1B, R1C) NO/NC - 100000 sykluser Konfigurerbar relé logikk: (R2A, R2B) Nei - 100000 sykluser
Maximum Response Time	<= 100 ms i STO (Safe Torque Off) R1A, R1B, R1C <= 7 ms, toleranse +/- 0.5 ms R2A, R2B <= 7 ms, toleranse +/- 0.5 ms
Minimum Brytestrøm	3 mA på 24 V DC for konfigurerbar relé logikk
Maximum Svitsjestrøm	R1, R2: 2 A på 250 V AC induktiv last, cos phi = 0,4 og L/R = 7 ms R1, R2: 2 A på 30 V DC induktiv last, cos phi = 0,4 og L/R = 7 ms R1, R2: 5 A på 250 V AC ohmsk last, cos phi = 1 og L/R = 0 ms R1, R2: 5 A på 30 V DC ohmsk last, cos phi = 1 og L/R = 0 ms
Digital Inngangsnummer	7
Digital Inngangstype	Programerbar (LI1...LI5)24 V DC (<= 30 V), med nivå 1 PLC - 3500 Ohm Programerbar bryter (LI6)24 V DC (<= 30 V), med nivå 1 PLC - 3500 Ohm Bytte-konfigurerbar PTC probe (LI6)0…6 følere - 1500 Ohm Sikkerhetsinngang (PWR)24 V DC (<= 30 V) - 1500 Ohm
Diskrét Inngangs Logikk	Negativ logikk (sink) (LI1...LI5), > 16 V (state 0), < 10 V (state 1) Positiv logikk (kilde) (LI1...LI5), < 5 V (state 0), > 11 V (state 1) Negativ logikk (sink) (LI6)hvis konfigurert som logisk inngang, > 16 V (state 0), < 10 V (state 1) Positiv logikk (kilde) (LI6)hvis konfigurert som logisk inngang, < 5 V (state 0), > 11 V (state 1)
Akselerasjons- Og Retardasjonsramper	Automatisk tilpasning av rampen hvis bremsekapasitet overskrides, ved hjelp av motstand Lineær justerbare separat fra 0,01 til 9000 s S, U eller tilpasset
Bremsing Til Stillstand	Ved DC-bremsing

Beskyttelsestype	Mot overskridelse av hastighetsgrenser: drive Mot bortfall av nettfase: drive Break on the control circuit: drive Input phase breaks: drive Line supply overvoltage: drive Line supply undervoltage: drive Overspenning mellom utgangsfaser og jording: drive Overopphetingsvern: drive Overspenninger på DC bus: drive Power removal: drive Short-circuit between motor phases: drive Thermal protection: drive Mot brudd av motorfase: Motor Power removal: Motor Thermal protection: Motor
Isolasjonsmotstand	> 1 mOhm 500 V DC i 1 minutt til jorden
Frekvensoppløsning	Analog inngang: 0.024/50 Hz Display unit: 0,1 Hz
Type Konnektor	1 RJ45 (on front face) for Modbus 1 RJ45 (on terminal) for Modbus Han SUB-D 9 på RJ45 for CANopen
Fysisk Interface	2-tråds RS 485 for Modbus
Ramme For Overføring	RTU for Modbus
Overføringshastighet	4800 bps, 9600 bps, 19200 bps, 38.4 Kbps for Modbus on terminal 9600 bps, 19200 bps for Modbus on front face 20 kbps, 50 kbps, 125 kbps, 250 kbps, 500 kbps, 1 Mbps for CANopen
Dataformat	8 bits, en stop, lik paritet for Modbus on front face 8 biter, odd selv eller ingen konfigurerbar paritet for Modbus on terminal
Antall Adresser	1…127 for CANopen 1…247 for Modbus
Tilgangsmetode	Slave CANopen
Merking	CE
Driftsposisjon	Vertikal +/- 10 grader
Vekt	102 kg
Bredde	340 mm
Høyde	1190 mm
Dybde	377 mm

Miljø

Støynivå	77 dB i samsvar med 86/188/EEC
Dielektrisk Styrke	3110 V DC mellom jord og effektklemmer 5345 V DC mellom kontroll og effektklemmer
Elektromagnetisk Kompatibilitet	Immunitetstest for ledet radiofrekvens nivå 3 i samsvar med IEC 61000-4-6 Electrical fast transient/burst immunity test nivå 4 i samsvar med IEC 61000-4-4 Immunitetstest for elektrostatisk utladning nivå 3 i samsvar med IEC 61000-4-2 Strålings radiofrekvente elektromagnetiske felt immunitet test nivå 3 i samsvar med IEC 61000-4-3 Spenningsfall og avbrudd immunitet test i samsvar med IEC 61000-4-11
Standarder	EN 55011 klasse A gruppe 2 EN 61800-3 environments 2 category C3 EN 61800-3 environments 1 category C3 EN/IEC 61800-5-1 UL Type 1 EN/IEC 61800-3 IEC 60721-3-3 class 3C2

Produktsertifikater	NOM 117 CSA DNV C-Tick GOST UL
Forurensninggrad	3 i samsvar med EN/IEC 61800-5-1 3 i samsvar med UL 840
Degree Of Proctection	IP41 on upper part i samsvar med EN/IEC 60529 IP41 on upper part i samsvar med EN/IEC 61800-5-1 IP54 on lower part i samsvar med EN/IEC 60529 IP54 on lower part i samsvar med EN/IEC 61800-5-1 IP00 i samsvar med EN/IEC 60529 IP00 i samsvar med EN/IEC 61800-5-1 IP30 on side parts i samsvar med EN/IEC 60529 IP30 on side parts i samsvar med EN/IEC 61800-5-1 IP30 on the front panel i samsvar med EN/IEC 60529 IP30 on the front panel i samsvar med EN/IEC 61800-5-1
Vibrasjonsmotstand	0,6 gn (f= 10…200 Hz) i samsvar med EN/IEC 60068-2-6 1.5mm topp til topp (f= 3…10 Hz) i samsvar med EN/IEC 60068-2-6
Støtmotstand	7 gn for 11 ms i samsvar med EN/IEC 60068-2-27
Relativ Fuktighet	5…95 % uten kondens i samsvar med IEC 60068-2-3 5…95 % uten dryppende vann i samsvar med IEC 60068-2-3
Omgivelsestemperatur For Drift	−10…45 °C (uten lastreduksjon) 45…60 °C (med belastningsfaktor)
Omgivelsestemperatur For Lagring	−25…70 °C
Driftshøyde	<= 1000 m uten lastreduksjon 1000...2260 m med dagens effektreduksjon 1% per 100 m

Forpakningsinformasjon

Enhetstype Pakke 1	PCE
Antall Enheter I Pakke 1	1
Pakke 1 Høyde	54,0 cm
Pakke 1 Bredde	43,0 cm
Pakke 1 Vekt	123,0 cm
Package 1 Weight	115,0 kg

Garantiperiode

Garanti	18 months

Bærekraft

Green Premium™-merket er Schneider Electrics forpliktelse til å levere produkter med den beste miljøytelsen i sin klasse. Green Premium lover samsvar med de nyeste forskriftene, åpenhet om miljøpåvirkning samt sirkulære og lite CO_2-produkter.

Veiledning til vurdering av produktets bærekraft er en innsiktsrapport som klargjør globale miljømerkestandarder og hvordan du tolker miljøerklæringer.

Les mer om Green Premium >

Veiledning i vurdering av bærekraften til et produkt >

RoHS/REACh

Tilfredshetsresultater

Kvikksølvfri	
Informasjon Om Rohs-Unntak	Ja

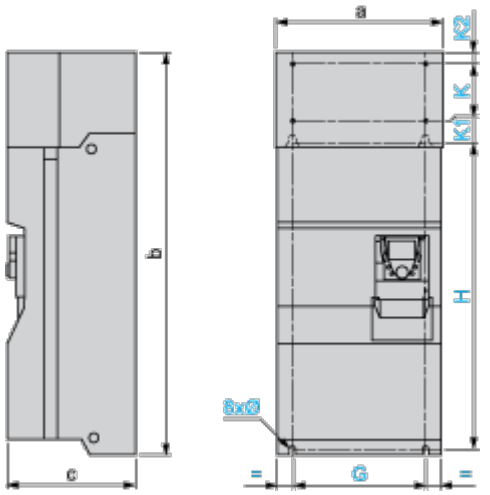
Sertifiseringer og standarder

Eu Rohs-Direktiv	Proaktivt i samsvar (Produktet inngår ikke i EUs RoHS direktivet) EU RoHS-erklæring
Kinas Rohs-Forskrift	Kinas RoHS–erklæring
Weee	Innen EU må produktet avhendes i henhold til bestemte regler for avfallshåndtering og aldri kastes som husholdningsavfall.

Dimensions Drawings

UL Type 1/IP 20 Drives

Dimensions with or without 1 Option Card (1)



Dimensions in mm

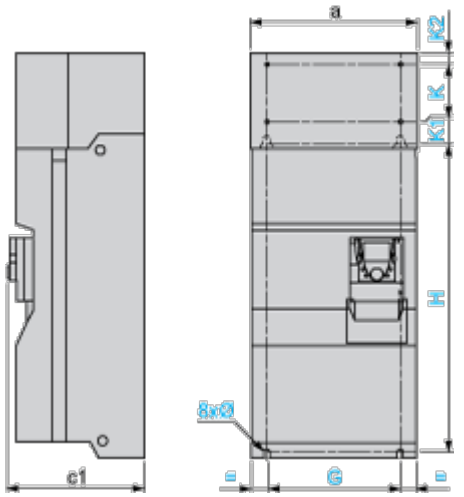
a	b	c	G	H	K	K1	K2	Ø
340	1190	377	285	920	150	75	30	11.5

Dimensions in in.

a	b	c	G	H	K	K1	K2	Ø
13.39	46.85	14.84	11.22	36.22	5.90	2.95	1.18	0.45

(1) Option cards: I/O extension cards, communication cards or "Controller Inside" programmable card.

Dimensions with 2 Option Cards (1)



Dimensions in mm

a	c1	G	H	K	K1	K2	Ø
340	392	285	920	150	75	30	11.5

Dimensions in in.

a	c1	G	H	K	K1	K2	Ø
13.39	15.43	11.22	36.22	5.90	2.95	1.18	0.45

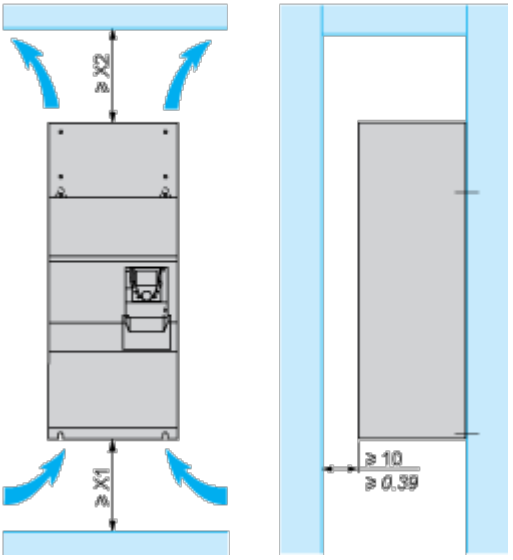
(1) Option cards: I/O extension cards, communication cards or "Controller Inside" programmable card.

Mounting and Clearance

Mounting Recommendations

Clearance

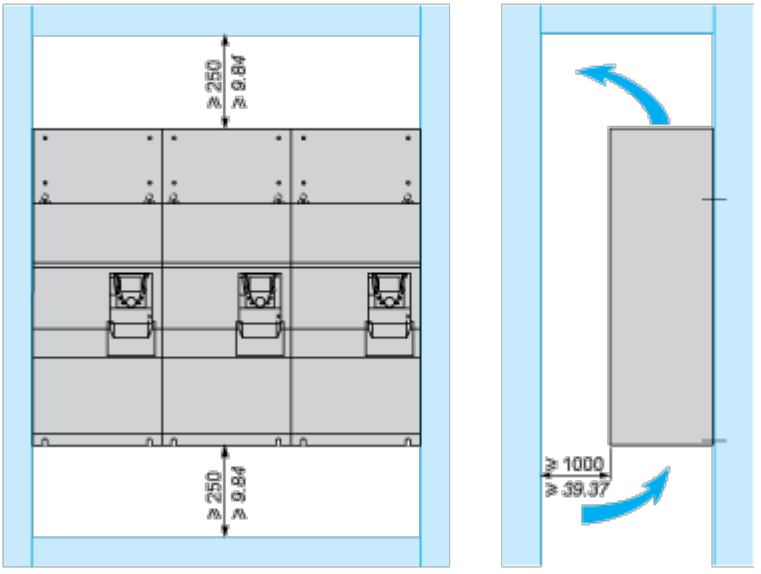
mm
in.



X1 in mm	X2 in mm	X1 in in.	X2 in in.
150	150	5.91	5.91

These drives can be mounted side by side, observing the following mounting recommendations:

mm
in.

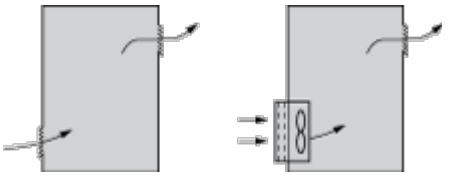


Specific Recommendations for Mounting the Drive in an Enclosure

Ventilation

To ensure proper air circulation in the drive:

- Fit ventilation grilles.
- Ensure that there is sufficient ventilation. If there is not, install a forced ventilation unit with a filter. The openings and/or fans must provide a flow rate at least equal to that of the drive fans (refer to the product characteristics).



- Use special filters with IP 54 protection.
- Remove the blanking cover from the top of the drive.

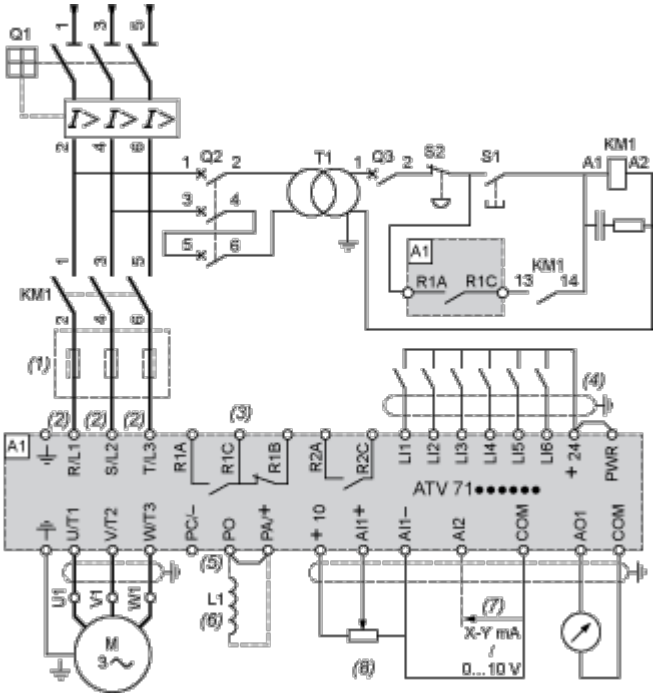
Dust and Damp Proof Metal Enclosure (IP 54)

The drive must be mounted in a dust and damp proof enclosure in certain environmental conditions: dust, corrosive gases, high humidity with risk of condensation and dripping water, splashing liquid, etc.
This enables the drive to be used in an enclosure where the maximum internal temperature reaches 50°C.

Connections and Schema

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 ATV61 drive

KM1 Contactor

L1 DC choke

Q1 Circuit-breaker

Q2 GV2 L rated at twice the nominal primary current of T1

Q3 GB2CB05

S1, S2 XB4 B or XB5 A pushbuttons

T1 100 VA transformer 220 V secondary

(1) Line choke (three-phase); mandatory for ATV61HC11Y…HC80Y drives (except when a special transformer is used (12-pulse)).

(2) For ATV61HC50N4, ATV61HC63N4 and ATV61HC50Y…HC80Y drives, 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 ATV61HC11Y…HC80Y drives.

(6) Optional DC choke for ATV61H•••M3, ATV61HD11M3X…HD45M3X and ATV61H075N4…HD75N4 drives. Connected in place of the strap between the PO and PA/+ terminals. For ATV61HD55M3X…HD90M3X, ATV61HD90N4…HC63N4 drives, the choke is supplied with the drive; the customer is responsible for connecting it. For ATV61W•••N4 and ATV61W•••N4C drives, the DC choke is integrated.

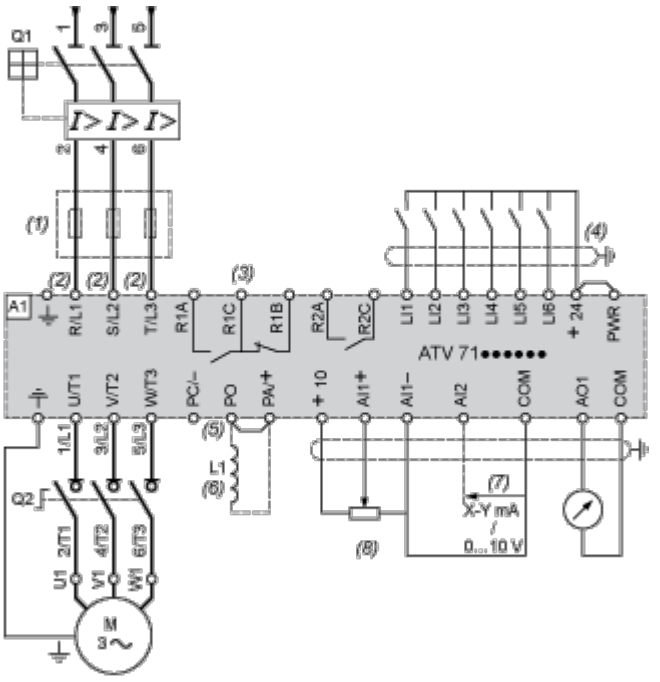
(7) Software-configurable current (0…20 mA) or voltage (0…10 V) analog input.

(8) Reference potentiometer.

NOTE: 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

Three-Phase Power Supply with Downstream Breaking via Switch Disconnector



A1 ATV61 drive

L1 DC choke

Q1 Circuit-breaker

Q2 Switch disconnector (Vario)

(1) Line choke (three-phase), mandatory for ATV61HC11Y…HC80Y drives (except when a special transformer is used (12-pulse)).

(2) For ATV61HC50N4, ATV61HC63N4 and ATV61HC50Y…HC80Y drives, 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 ATV61HC11Y…HC80Y drives.

(6) Optional DC choke for ATV61H•••M3, ATV61HD11M3X…HD45M3X and ATV61H075N4…HD75N4 drives. Connected in place of the strap between the PO and PA/+ terminals. For ATV61HD55M3X…HD90M3X, ATV61HD90N4…HC63N4 drives, the choke is supplied with the drive; the customer is responsible for connecting it. For ATV61W•••N4 and ATV61W•••N4C drives, the DC choke is integrated.

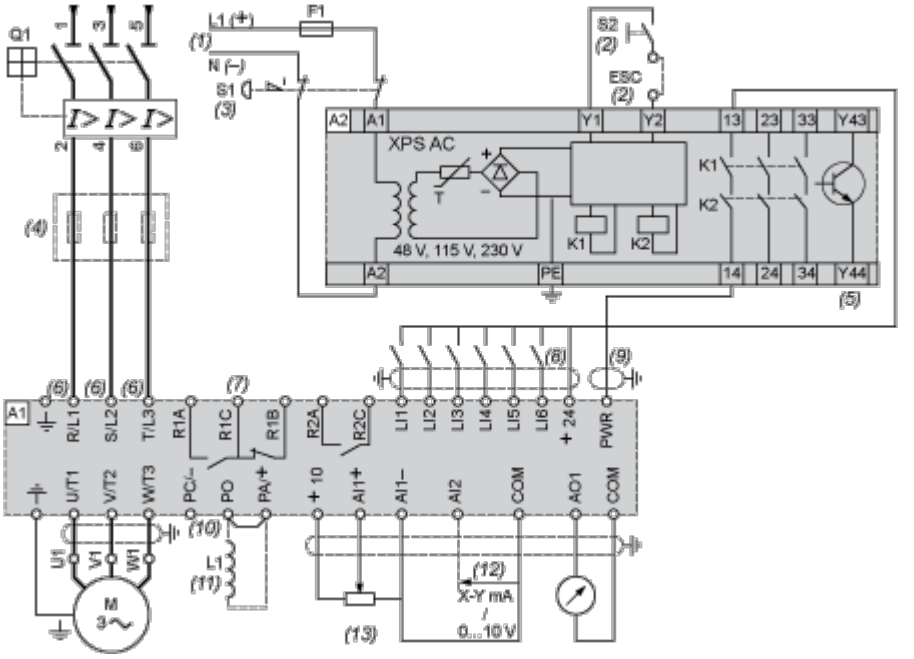
(7) Software-configurable current (0…20 mA) or voltage (0…10 V) analog input.

(8) Reference potentiometer.

NOTE: 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 3, IEC/EN 61508 Capacity SIL2, in Stopping Category 0 According to IEC/EN 60204-1

Three-Phase Power Supply, Low Inertia Machine, Vertical Movement



A1 ATV61 drive

A2 Preventa XPS AC safety module for monitoring emergency stops and switches. One safety module can manage the “Power Removal” function for several drives on the same machine. In this case, each drive must connect its PWR terminal to its + 24 V via the safety contacts on the XPS AC module. These contacts are independent for each drive.

F1 Fuse

L1 DC choke

Q1 Circuit-breaker

S1 Emergency stop button with 2 contacts

S2 XB4 B or XB5 A pushbutton

(1) Power supply: 24 Vdc or Vac, 115 Vac, 230 Vac.

(2) S2: resets XPS AC module on power-up or after an emergency stop. ESC can be used to set external starting conditions.

(3) Requests freewheel stopping of the movement and activates the “Power Removal” safety function.

(4) Line choke (three-phase), mandatory for and ATV61HC11Y…HC80Y drives (except when a special transformer is used (12-pulse)).

(5) The logic output can be used to signal that the machine is in a safe stop state.

(6) For ATV61HC50N4, ATV61HC63N4 and ATV61HC50Y…HC80Y drives, refer to the power terminal connections diagram.

(7) Fault relay contacts. Used for remote signalling of the drive status.

(8) 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).

(9) Standardized coaxial cable, type RG174/U according to MIL-C17 or KX3B according to NF C 93-550, external diameter 2.54 mm /0.09 in., maximum length 15 m / 49.21 ft. The cable shielding must be earthed.

(10) There is no PO terminal on ATV61HC11Y…HC80Y drives.

(11) Optional DC choke for ATV61H•••M3, ATV61HD11M3X…HD45M3X and ATV61H075N4…HD75N4 drives. Connected in place of the strap between the PO and PA/+ terminals. For ATV61HD55M3X…HD90M3X,

ATV61HD90N4…HC63N4 drives, the choke is supplied with the drive; the customer is responsible for connecting it. For ATV61W•••N4 and ATV61W•••N4C drives, the DC choke is integrated.

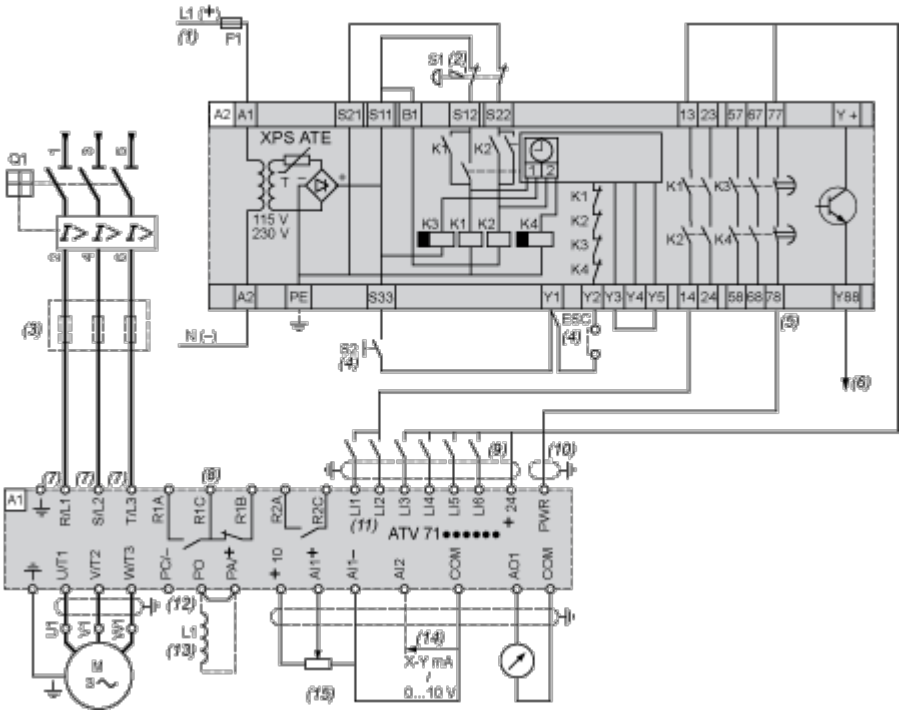
(12) Software-configurable current (0…20 mA) or voltage (0…10 V) analog input.

(13) Reference potentiometer.

NOTE: 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 3, IEC/EN 61508 Capacity SIL2, in Stopping Category 1 According to IEC/EN 60204-1

Three-Phase Power Supply, High Inertia Machine



A1 ATV61 drive

A2 (5) Preventa XPS ATE safety module for monitoring emergency stops and switches. One safety module can manage the "Power Removal" safety function for several drives on the same machine. In this case the time delay must be adjusted on the drive controlling the motor that requires the longest stopping time. In addition, each drive must connect its PWR terminal to its + 24 V via the safety contacts on the XPS ATE module. These contacts are independent for each drive.

F1 Fuse

L1 DC choke

Q1 Circuit-breaker

S1 Emergency stop button with 2 contacts

S2 XB4 B or XB5 A pushbutton

(1) Power supply: 24 Vdc or Vac, 115 Vac, 230 Vac.

(2) Requests controlled stopping of the movement and activates the "Power Removal" safety function.

(3) Line choke (three-phase), mandatory for ATV61HC11Y…HC80Y drives (except when a special transformer is used (12-pulse)).

(4) S2: resets XPS ATE module on power-up or after an emergency stop. ESC can be used to set external starting conditions.

(5) The logic output can be used to signal that the machine is in a safe state.

(6) For stopping times requiring more than 30 seconds in category 1, use a Preventa XPS AV safety module which can provide a maximum time delay of 300 seconds.

(7) For ATV61HC50N4, ATV61HC63N4 and ATV61HC50Y…HC80Y drives, refer to the power terminal connections diagram.

(8) Fault relay contacts. Used for remote signalling of the drive status.

(9) 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).

(10) Standardized coaxial cable, type RG174/U according to MIL-C17 or KX3B according to NF C 93-550, external diameter 2.54 mm/0.09 in., maximum length 15 m/49.21 ft. The cable shielding must be earthed.

(11) Logic inputs LI1 and LI2 must be assigned to the direction of rotation: LI1 in the forward direction and LI2 in the reverse direction.

(12) There is no PO terminal on ATV61HC11Y…HC80Y drives.

(13) Optional DC choke for ATV61H•••M3, ATV61HD11M3X…HD45M3X and ATV61H075N4…HD75N4 drives. Connected in place of the strap between the PO and PA/+ terminals. For ATV61HD55M3X…HD90M3X, ATV61HD90N4…HC63N4 drives, the choke is supplied with the drive; the customer is responsible for connecting it. For ATV61W•••N4 and ATV61W•••N4C drives, the DC choke is integrated.

(14) Software-configurable current (0…20 mA) or voltage (0…10 V) analog input.

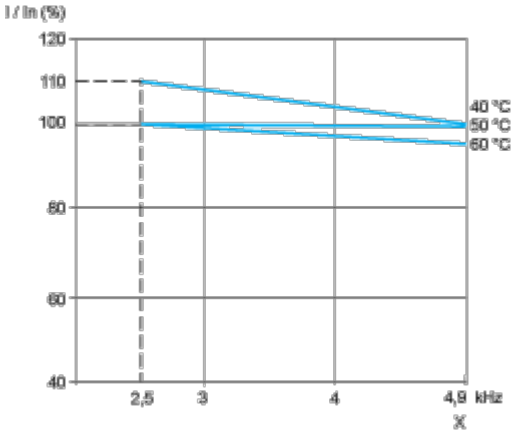
(15) Reference potentiometer.

NOTE: 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.

Performance Curves

Derating Curves

The derating curves for the drive nominal current (In) depend on the temperature and the switching frequency. For intermediate temperatures (e.g. 55°C), interpolate between 2 curves.



X Switching frequency