



Teknisk informasjon

Produktspekter	Altivar Machine ATV340
Produkt eller type komponent	Frekvensomformer
Produktspesifikk applikasjon	Machine
Variant	Standard versjon
Monteringsmetode	Cabinet mount
Kommunikasjonsprotokoll	Modbus serial
Funksjonskort	Communication module, Profibus DP V1 Communication module, Profinet Communication module, DeviceNet Communication module, CANopen Communication module, EtherCAT
Antall faser i nettverket	3 faser
Nettfrekvens	50...60 Hz +/- 5 %
[Us] matespenning	380...480 V - 15...10 %
Nominell utgangsstrøm	12,7 A
Motoreffekt kW	7.5 KW for normal duty 5,5 kW for heavy duty
Motoreffekt hk	10 Hp for normal duty 7 hp for heavy duty
EMC filter	Class C3 EMC filter integrated
IP grad av beskyttelse	IP20

Komplementær

Discrete input number	5
Discrete input type	PTI programmerbar puls inngang: 0...30 kHz, 24 V DC (30 V) DI1...DI5 sikkert utkoblet moment, 24 V DC (30 V), impedans: 3.5 kOhm programmerbar
Number of preset speeds	16 forhåndsinnstilte hastigheter
Discrete output number	2,0
Digitale utganger	Programmable output DQ1, DQ2 30 V DC 100 mA
Antall analoge innganger	2
Analogue input type	AI1 software-configurable current: 0...20 mA, impedance: 250 Ohm, resolution 12 bits AI1 software-configurable temperature probe or water level sensor AI1 software-configurable voltage: 0...10 V DC, impedance: 31.5 kOhm, resolution 12 bits AI2 software-configurable voltage: - 10...10 V DC, impedance: 31.5 kOhm, resolution 12 bits
Analog utgangsnummer	2
Analog utgangstype	Software-configurable voltage AQ1: 0...10 V DC impedance 470 Ohm, resolution 10 bits Software-configurable current AQ1: 0...20 mA impedance 500 Ohm, resolution 10 bits
Relé utgang nummer	2
Utgangsspenning	<= strømforsyningsspenning
Reléutgangstype	Relay outputs R1A Relay outputs R1C electrical durability 100000 cycles Relay outputs R2A Relay outputs R2C electrical durability 100000 cycles

Maximum svitsjestrøm	Relay output R1C on resistive load, $\cos \phi = 1$: 3 A at 250 V AC Relay output R1C on resistive load, $\cos \phi = 1$: 3 A at 30 V DC Relay output R1C on inductive load, $\cos \phi = 0.4$ and $L/R = 7$ ms: 2 A at 250 V AC Relay output R1C on inductive load, $\cos \phi = 0.4$ and $L/R = 7$ ms: 2 A at 30 V DC Relay output R2C on resistive load, $\cos \phi = 1$: 5 A at 250 V AC Relay output R2C on resistive load, $\cos \phi = 1$: 5 A at 30 V DC Relay output R2C on inductive load, $\cos \phi = 0.4$ and $L/R = 7$ ms: 2 A at 250 V AC Relay output R2C on inductive load, $\cos \phi = 0.4$ and $L/R = 7$ ms: 2 A at 30 V DC
Minimum brytestrøm	Relay output R1B: 5 mA at 24 V DC Relay output R2C: 5 mA at 24 V DC
Fysisk interface	2-tråds RS 485
Tilkoblingstype	1 RJ45
Tilgangsmetode	Slave Modbus RTU
Overføringshastighet	4.8 kbit/s 9.6 kbit/s 19.2 kbit/s 38.4 kbit/s
Ramme for overføring	RTU
Antall adresser	1...247
Datoformat	8 bits, konfigurierbar Odd, selv eller ingen paritet
Polarisasjonstype	Ingen impedans
4 quadrant operation possible	True
Motorkontroll metode	Variabelt dreiemoment standard Optimalisert dreiemoment-modus Konstant dreiemoment standard
Synchronous motor control profile	Permanent magnet motor Reluctance motor
Forurensninggrad	2 i samsvar med EN/IEC 61800-5-1
Maximum output frequency	0,599 kHz
Akselerasjons- og retardasjonsramper	Linear adjustable separately from 0.01...9999 s S, U eller tilpasset
Motor slip kompensasjon	Justrbar Automatic whatever the load Can be suppressed Not available in permanent magnet motor law
Switching frequency	2...16 kHz adjustable 7...16 kHz with derating factor
Nominell svitsjefrekvens	4 kHz
Bremsing til stillstand	Ved DC-bremsing
Brake chopper integrated	True
Nettstrøm	15.3 A at 380 V (normal duty) 12.2 A at 480 V (normal duty) 20.0 A at 380 V (heavy duty) 16.0 A at 480 V (heavy duty)
Nettstrøm	20 A at 380 V without line choke (heavy duty) 16 A at 480 V without line choke (heavy duty) 15.3 A at 380 V with external line choke (normal duty) 12.2 A at 480 V with external line choke (normal duty) 11.6 A at 380 V with external line choke (heavy duty) 9.4 A at 480 V with external line choke (heavy duty)
Maximum input current	20,0 A
Maximum output voltage	480 V
Tilsynelatende effekt	12.1 KVA at 480 V (normal duty) 13.3 kVA at 480 V (heavy duty)
Maksimale transient strøm	18.2 A during 60 s (normal duty) 19.1 A during 60 s (heavy duty) 22.3 A during 2 s (normal duty) 22.9 A during 2 s (heavy duty)
Elektrisk tilkobling	Screw terminal, clamping capacity: 4...6 mm ² for DC bus Screw terminal, clamping capacity: 0.2...2.5 mm ² for control Screw terminal, clamping capacity: 1.5...6 mm ² for line side Screw terminal, clamping capacity: 1.5...6 mm ² for motor
Maks kortslutningsnivå I _{sc}	22 kA
Base load current at high overload	12,7 A

Base load current at low overload	16,5 A
Effekttap i W	Natural convection: 134 W at 380 V, switching frequency 4 kHz (heavy duty) Forced convection: 134 W at 380 V, switching frequency 4 kHz (heavy duty) Natural convection: 164 W at 380 V, switching frequency 4 kHz (normal duty) Forced convection: 164 W at 380 V, switching frequency 4 kHz (normal duty)
Elektrisk tilkobling	DC bus: screw terminal 4...6 mm ² /AWG 12...AWG 10 Control: screw terminal 0.2...2.5 mm ² /AWG 24...AWG 12 Line side: screw terminal 1.5...6 mm ² /AWG 14...AWG 10 Motor: screw terminal 1.5...6 mm ² /AWG 14...AWG 10
With safety function Safely Limited Speed (SLS)	True
With safety function Safe brake management (SBC/ SBT)	True
With safety function Safe Operating Stop (SOS)	False
With safety function Safe Position (SP)	False
With safety function Safe programmable logic	False
With safety function Safe Speed Monitor (SSM)	False
With safety function Safe Stop 1 (SS1)	True
With sft fct Safe Stop 2 (SS2)	False
With safety function Safe torque off (STO)	True
With safety function Safely Limited Position (SLP)	False
With safety function Safe Direction (SDI)	False
Beskyttelsestype	Thermal protection: Motor Safe torque off: Motor Motor phase loss: motor Thermal protection: drive Safe torque off: drive Overoppvarming: drive Overcurrent: drive Output overcurrent between motor phase and earth: drive Output overcurrent between motor phases: drive Short-circuit between motor phase and earth: drive Short-circuit between motor phases: drive Motor phase loss: drive DC Bus overvoltage: drive Line supply overvoltage: drive Line supply undervoltage: drive Input supply loss: drive Exceeding limit speed: drive Break on the control circuit: drive
Bredde	110,0 mm
Høyde	270,0 mm
Dybde	234,0 mm
Vekt	2,9 kg
Nominell utgangsstrøm	16.5 A at 4 kHz for normal duty 12.7 A at 4 kHz for heavy duty

Miljø

Operating altitude	<= 3000 m with current derating above 1000m
Driftsposisjon	Vertikal +/- 10 grader
Produktsertifikater	UL CSA TÜV EAC CTick
Merking	CE
Standarder	EN/IEC 61800-3 EN/IEC 61800-5-1 IEC 60721-3 IEC 61508 IEC 13849-1 UL 618000-5-1 UL 508C
Monteringsmåte	Med kjølelegeme

Elektromagnetisk kompatibilitet	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 Electrical fast transient/burst immunity test nivå 4 i samsvar med IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test nivå 3 i samsvar med IEC 61000-4-5 Immunitetstest for ledet radiofrekvens nivå 3 i samsvar med IEC 61000-4-6
Environmental class (during operation)	Class 3C3 according to IEC 60721-3-3 Class 3S3 according to IEC 60721-3-3
Maximum acceleration under shock impact (during operation)	70 m/s² at 22 ms
Maximum acceleration under vibrational stress (during operation)	5 m/s² at 9...200 Hz
Maximum deflection under vibratory load (during operation)	1.5 mm at 2...9 Hz
Permitted relative humidity (during operation)	Class 3K5 according to EN 60721-3
Volum av kjøleluft	76,0 m³/t
Kjølemetode	Tvangsstyrt konveksjon
Overspenningskategori	Class III
Reguleringssløyfe	Justerbar PID regulator
Støynivå	46,6 dB
Forurensninggrad	2
Ambient air transport temperature	-40...70 °C
Omgivelsestemperatur for drift	-15...50 °C without derating (vertical position) 50...60 °C with derating factor (vertical position)
Omgivelsestemperatur for lagring	-40...70 °C
Skille	Between power and control terminals

Forpakkingsinformasjon

Enhetstype forpakning 1	PCE
Antall enheter forpakning 1	1
Forpakning 1 vekt	3,72 kg
Forpakning 1 høyde	13 cm
Forpakning 1 bredde	37 cm
Forpakning 1 lengde	31,5 cm
Enhetstype forpakning 2	S04
Antall enheter forpakning 2	2
Forpakning 2 vekt	8,14 kg
Forpakning 2 høyde	30 cm
Forpakning 2 bredde	40 cm
Forpakning 2 lengde	60 cm
Enhetstype forpakning 3	P06
Antall enheter forpakning 3	10
Forpakning 3 vekt	50,2 kg
Forpakning 3 høyde	80 cm
Forpakning 3 bredde	80 cm
Forpakning 3 lengde	60 cm

Bærekraftig

Produktets miljøstatus	Green Premium miljømerket produkt
REACH-regelverk	REACH-erklæring
EU RoHS-direktiv	Proaktivt i samsvar (Produktet inngår ikke i EUs RoHS direktivet) EU RoHS-erklæring
Kvikksølvfri	Ja
Informasjon om RoHS-unntak	Ja
Kinas RoHS-forskrift	Kinas RoHS-Erklæring
Miljøinformasjon	Produktmiljøprofil
Produktets livssyklus	Informasjon Om Levetidsslutt

WEEE	Innen EU må produktet avhendes i henhold til bestemte regler for avfallshåndtering og aldri kastes som husholdningsavfall.
Oppgraderbarhet	 Oppgraderte Komponenter Tilgjengelig
Garantiperiode	
Garanti	18 måneder