

Tehničke karakteristike proizvoda

Karakteristike

ATV340D22N4E

frekventni regulator - 22kW- 400V - 3-fazno -
ATV340 Ethernet



Osnovne informacije

Grupa proizvoda	Altivar Machine ATV340
Tip proizvoda ili komponente	Frekventni regulator
Specifične primene proizvoda	Machine
Posebna izvedba	Standardna verzija
Način montiranja	Montaža u kućište
Protokol komunikacionog porta	Modbus TCP Ethernet/IP Modbus serijska veza
Opciona kartica	Communication module, Profibus DP V1 Communication module, Profinet Communication module, DeviceNet Communication module, CANopen Communication module, EtherCAT
Broj faza mreže	Trofazne
Frekvencija napajanja	50...60 Hz +/- 5 %
[us] nazivni napon napajanja	380...480 V - 15...10 %
Nazivna izlazna struja	46,0 A
Snaga motora kw	30 KW for normal duty 22 kW for heavy duty
Snaga motora hp	40 Hp for normal duty 30 hp for heavy duty
Emc filter	Klasa C3 EMC integrisani filter
Ip stepen zaštite	IP20

Dopunske informacije

Broj digitalnog ulaza	5
Tip digitalnih ulaza	PTI podesivi kao impulsni ulaz: 0...30 kHz, 24 V DC (30 V) DI1...DI5 Safe torque off, 24 V DC (30 V), impedansa: 3.5 kΩ podesivi
Number of preset speeds	16 predefinisanih brzina
Broj digitalnih izlaza	2,0
Tip digitalnih izlaza	Programmable output DQ1, DQ2 30 V DC 100 mA
Broj analognih ulaza	2
Tip analognog ulaza	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
Broj analognih izlaza	2
Tip analognog izlaza	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
Broj releja	2
Izlazni napon	<= napon napajanja

Tip izlaznog releja	Relay outputs R1A Relay outputs R1C electrical durability 100000 cycles Relay outputs R2A Relay outputs R2C electrical durability 100000 cycles
Maksimalna struja preklapanja	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
Minimalna struja preklapanja	Relay output R1B: 5 mA at 24 V DC Relay output R2C: 5 mA at 24 V DC
Fizički interfejs	2-žični RS 485
Tip priključka	3 RJ45
Način pristupa	Slave Modbus RTU Slave Modbus TCP
Brzina prenosa	4.8 kbit/s 9.6 kbit/s 19.2 kbit/s 38.4 kbit/s
Poruka za prenos	RTU
Broj adresa	1...247
Format podataka	8 bitova, konfigurabilno neparno, parno ili bez parnosti
Tip polarizacije	Bez impedanse
4 quadrant operation possible	Tačno
Profil upravljanja asinhronim motorom	Optimalni moment Standardni konstantni moment Promenljivi moment
Profil upravljanja sinhronim motorom	Motor sa permanentnim magnetima Reluktansa motora
Stepen zaprljanosti	2 conforming to EN/IEC 61800-5-1
Maksimalna izlazna frekvencija	0,599 kHz
Rampe ubrzanja i usporjenja	S, U ili korisnički definisano Linearno podesivo zasebno od 0.01 do 9999 s
Kompenzacija klizanja motora	Automatska bez obzira na opterećenje Može se ukinuti Podesiva Nedostupna u "Permanent magnet motor" upravljanju
Prekidačka frekvencija	2...16 kHz adjustable 6...16 kHz with derating factor
Nazivna prekidačka frekvencija	4 kHz
Kočenje do mirovanja	Sa ubacivanjem DC struje
Brake chopper integrated	Tačno
Linijska struja	60.1 A at 380 V (normal duty) 48.6 A at 480 V (normal duty) 63.5 A at 380 V (heavy duty) 50.6 A at 480 V (heavy duty)
Linijska struja	63.5 A at 380 V without line choke (heavy duty) 50.5 A at 480 V without line choke (heavy duty) 67,9 A pri 480 V sa spoljašnjom linijskom prigušnicom (normalan rad) 54,4 A pri 380 V sa spoljašnjom linijskom prigušnicom (zahtevne aplikacije) 64,1 A pri 480 V sa spoljašnjom linijskom prigušnicom (zahtevne aplikacije) 50,8 A pri 380 V sa spoljašnjom linijskom prigušnicom (normalan rad)
Maximum input current	63,5 A
Maximum output voltage	480 V
Prividna snaga	45.1 KVA at 480 V (normal duty) 42.1 kVA at 480 V (heavy duty)
Maksimalna prelazna struja	68.2 A during 60 s (normal duty) 69 A during 60 s (heavy duty) 83.7 A during 2 s (normal duty) 83 A during 2 s (heavy duty)

Električna veza	Screw terminal, clamping capacity: 0.2...2.5 mm ² for control Screw terminal, clamping capacity: 6...25 mm ² for motor Screw terminal, clamping capacity: 10...25 mm ² for line side Screw terminal, clamping capacity: 10...25 mm ² for DC bus
Struja linijskog kratkog spoja isc	22 kA
Base load current at high overload	46,0 A
Base load current at low overload	62,0 A
Snaga disipacije u w	Natural convection: 28 W at 380 V, switching frequency 4 kHz (heavy duty) Forced convection: 486 W at 380 V, switching frequency 4 kHz (heavy duty) Natural convection: 39 W at 380 V, switching frequency 4 kHz (normal duty) Forced convection: 631 W at 380 V, switching frequency 4 kHz (normal duty)
Električna veza	Control: screw terminal 0.2...2.5 mm ² /AWG 24...AWG 12 Motor: screw terminal 6...25 mm ² /AWG 8...AWG 3 Line side: screw terminal 10...25 mm ² /AWG 6...AWG 3 DC bus: screw terminal 10...25 mm ² /AWG 6...AWG 3
With safety function Safely Limited Speed (SLS)	Tačno
With safety function Safe brake management (SBC/ SBT)	Tačno
With safety function Safe Operating Stop (SOS)	Netačno
With safety function Safe Position (SP)	Netačno
With safety function Safe programmable logic	Netačno
With safety function Safe Speed Monitor (SSM)	Netačno
With safety function Safe Stop 1 (SS1)	Tačno
With sft fct Safe Stop 2 (SS2)	Netačno
With safety function Safe torque off (STO)	Tačno
With safety function Safely Limited Position (SLP)	Netačno
With safety function Safe Direction (SDI)	Netačno
Tip zaštite	Thermal protection: motor Safe torque off: motor Motor phase loss: motor Thermal protection: drive Safe torque off: drive Overheating: 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
Širina	180,0 mm
Visina	385,0 mm
Dubina	249,0 mm
Masa proizvoda	10,2 kg
Stalna izlazna struja	62 A at 4 kHz for normal duty 46 A at 4 kHz for heavy duty

Okruženje

Nadmorska visina za rad uređaja	<= 3000 m with current derating above 1000m
Radni položaj	Vertikalno +/- 10 stepeni
Sertifikacija proizvoda	UL CSA TÜV EAC CTick REACH RoHS
Označavanje	CE
Standardi	EN/IEC 61800-3 EN/IEC 61800-5-1 IEC 60721-3 IEC 61508 IEC 13849-1 UL 618000-5-1 UL 508C
Način spajanja	Sa hladnjakom
Elektromagnetna kompatibilnost	Electrostatic discharge immunity test level 3 conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6
Environmental class (during operation)	Klasa 3C3 prema IEC 60721-3-3 Class 3S3 according to IEC 60721-3-3
Maximum acceleration under shock impact (during operation)	70 m/s ² at 22 ms
Maximum acceleration under vibrational stress (during operation)	5 m/s ² at 9...200 Hz
Maximum deflection under vibratory load (during operation)	1.5 mm at 2...9 Hz
Permitted relative humidity (during operation)	Klasa 3K5 u skladu sa EN 60721-3
Količina vazduha za hlađenje	128,0 m ³ /h
Tip hlađenja	Ventilatorom za strujanje vazduha
Kategorija prenapona	Class III
Podešavanje petlje	Podesivi PID regulator
Nivo buke	56,7 dB
Stepen zaprljanosti	2
Ambient air transport temperature	-40...70 °C
Temperatura okoline za rad	-15...50 °C without derating (vertical position) 50...60 °C with derating factor (vertical position)
Temperatura okoline za skladištenje	-40...70 °C
Izolacija	Između napajanja i kontrolnih priključaka

Pakovanje

Tip jedinice pakovanja 1	PCE
Broj jedinica u pakovanju 1	1
Pakovanje 1 težina	11,89 kg
Pakovanje 1 visina	29,8 cm
Pakovanje 1 širina	54,8 cm
Pakovanje 1 dužina	33,7 cm
Pakovanje 2 težina	36,78 kg

Održivost ponude

Status održive ponude	Green Premium proizvod
Propis REACh	📄 REACh Deklaracija
EU RoHS direktiva	Proaktivna usaglašenost (proizvod nije u zakonskom okviru direktive EU RoHS) 📄 EU RoHS deklaracija
Bez žive	Da
Informacije o RoHS izuzecima	📄 Da
RoHS regulativa za Kinu	📄 RoHS Deklaracija Za Kinu
Izjava o zaštiti okoliša	📄 Profil Ekološke Prihvatljivosti Proizvoda
Profil cirkularnosti	📄 Informacije O Kraju Radnog Veka
WEEE	Ovaj proizvod je na tržištima Evropske unije neophodno odložiti u skladu sa specifičnim smernicama za prikupljanje otpada i nikako ne sme da dospe u kontejnere za otpatke.
Mogućnost nadogradnje	📄 Dostupne Su Nadograđene Komponente