DATASHEET - RASP5-4401A31-5120000S1

Speed controllers, 4.3 A, 1.5 kW, Sensor input 4, 180/207 V DC, AS-Interface ($\!\!\!\mathrm{R}$, S-7.4 for 31 modules, HAN Q5



Part no.

RASP5-4401A31-5120000S1 198760

Product name	Eaton Moeller® series Rapid Link Speed controller
Part no.	RASP5-4401A31-5120000S1
EAN	4015081968183
Product Length/Depth	157 millimetre
Product height	270 millimetre
Product width	220 millimetre
Product weight	3.41 kilogram
Certifications	UL 61800-5-1 RoHS CE UL approval IEC/EN 61800-5-1
Product Tradename	Rapid Link
Product Type	Speed controller
Product Sub Type	None
Catalog Notes	can be switched over from U/f to (vector) speed control Connection of supply voltage via adapter cable on round or flexible busbar junctio Diagnostics and reset on device and via AS-Interface Four fixed speeds integrated PTC thermistor monitoring and Thermoclick with safe isolation optional: 4 sensor inputs with M12-Y adapter for switchover to creep speed optional: Faster stop if external 24 V fails Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation with AUTO - OFF/RESET - HAND key switches with selector switch REV - OFF - FWD
Features	Parameterization: drivesConnect mobile (App) Parameterization: Fieldbus Parameterization: drivesConnect Diagnostics and reset on device and via AS-Interface Parameterization: Keypad
Fitted with:	PC connection Four fixed speeds Control unit Internal DC link IGBT inverter Selector switch (Positions: REV - OFF - FWD) PTC thermistor monitoring Thermo-click with safe isolation Key switch position HAND Key switch position OFF/RESET Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation Key switch position AUTO
Functions	For actuation of motors with mechanical brake
Degree of protection	IP65 NEMA 12
Electromagnetic compatibility	1st and 2nd environments (according to EN 61800-3)
Overvoltage category	III III
Product category	Speed controller
Protocol	AS-Interface profile cable: S-7.4 for 31 modules ASI
Radio interference class	C2, C3: depending on the motor cable length, the connected load, and ambient conditions. External radio interference suppression filters (optional) may be necessary. C1: for conducted emissions only
Rated impulse withstand voltage (Uimp)	2000 V
System configuration type	AC voltage Center-point earthed star network (TN-S network) Phase-earthed AC supply systems are not permitted.

Autority partials Image: Status and		
Shear restance Notice Note of the second se		
Intercent of the second seco	Mounting position	
National Number of the states of	Shock resistance	
Advice operating sumpariture - max Main any performance - max Main any performance - max Advice operating sumpariture - max Main any performance - max Main any performance - max Advice operating sumpariture - max Main any performance - max Main any performance - max Advice of the sumpariture - max Main any performance - max Main any performance - max Advice operating sumpariture - max Main any performance - max Main any performance - max Advice operating - max Main any performance - max Main any performance - max Delay inter Carrent - Main Any performance - max Carrent - Main Any performance - Main Control Basic distancion of control operating - max Carrent - Main Any performance - Main Control Carrent - Main Any performance - Main Control Basic distancion of control operating - max Carrent - Main Any performance - Main Control - Main Any performance - Main Any performance - Main Control - Main Any performance - Main Any performance - Main Control	Vibration	Resistance: 57 Hz, Amplitude transition frequency on acceleration Resistance: 10 - 150 Hz, Oscillation frequency
Advice operating sumpariture - max Main any performance - max Main any performance - max Advice operating sumpariture - max Main any performance - max Main any performance - max Advice operating sumpariture - max Main any performance - max Main any performance - max Advice of the sumpariture - max Main any performance - max Main any performance - max Advice operating sumpariture - max Main any performance - max Main any performance - max Advice operating - max Main any performance - max Main any performance - max Delay inter Carrent - Main Any performance - max Carrent - Main Any performance - Main Control Basic distancion of control operating - max Carrent - Main Any performance - Main Control Carrent - Main Any performance - Main Control Basic distancion of control operating - max Carrent - Main Any performance - Main Control - Main Any performance - Main Any performance - Main Control - Main Any performance - Main Any performance - Main Control		
Addient journer stare - max Addient to say a targentur - max -0 °C Addient to say a targentur - max -0 °C Definition control -0 °C Carset Linutoin -0 °C Carset Linutoin -0 °C Definition control -0 °C	Altitude	Max. 2000 m
Antisient strage tamparture - min Image: Strage tamparture - min Antisient strage tamparture - max No C Antisient strage tamparture - max No C Personal parture - max So Control parture - max Personal parture - max So Control parture - max Personal parture - max So Control parture - max Personal parture - max So Control parture - max Personal parture - max So Control parture - max Personal parture - max So Control parture - max Personal parture - max So Control parture - max Personal parture - max So Control parture - max Personal parture - max So Control parture - partu	Ambient operating temperature - min	-10 °C
Antient stronge temperature - max In accordance with EUCH 30178 Cincuis proofing In accordance with EUCH 30178 Convert limitation In accordance with EUCH 30178 Dury time Add 4.4 A, moter ministic first. Diry time 9 Min Efficiency 9 Min Het displation at current/speed 23.5 Min 256 current and 56 speed Spect current LM at 195% speed at 35.2 Min 4256 current and 56 speed at 35.2 Min 40% current and 50% speed at 32.4 Min 40% current at 50% current 50% curent at 50% curent at 50% current 32.5 Min 50% current 32	Ambient operating temperature - max	40 °C
Climate proving In accordence with NEGN W18 Current limitation 4.4.3 A, incice, main create Delay time 4.4.3 A, incice, main create Ediviny 4.4.3 A, incice, main create Ediviny 8.5 (n) Heat displation at current/based 9.5 (n) Mains current displation at current displation at current and 9.5 speed 4.1 A Labage current at grand PE max 10.5 (numeri and 9.5 speed) Mains current displation for 10.5 (numeri and 9.5 speed) Mains current displation for 10.5 (numeri and 9.5 speed) Mains current displation for 10.5 (numeri and 9.5 speed) Mains current displation for time every BI accords 10.5 (numeri and 9.5 speed) Mains current displation for time every BI accords 10.5 (numeri and 9.5 speed) Mains current displation for time every BI accords 10.5 (numeri and 9.5 speed)	Ambient storage temperature - min	-40 °C
Current limitation < > 5 %, in candidestable Current limitation 0.4 - 3 A, indite, main circuit Datay time < 0.6 - 40 W, 	Ambient storage temperature - max	70 °C
Delay time Adjustable, motic, main circuit Belay time 5 m 5, 0 m 4diay Efficiency 5 m 5, 0 m 4diay Heat dissipation at current/speed 5 m 5, 0 m 4diay Index current dissipation at current/speed 5 m 5, 0 m 4diay Index current dissipation at current/speed 5 m 5, 0 m 4diay Index current dissipation at current/speed 5 m 5, 0 m 4diay Index current dissipation at current/speed 5 m 5, 0 m 4diay Index current dissipation at current/speed 5 m 5, 0 m 4diay Index current dissipation at current/speed 5 m 5, 0 m 4diay Index current dissipation at current/speed 5 m 5, 0 m 4diay Mains current dissipation at current/speed 5 m 5, 0 m 4diay Mains current dissipation at current/speed 5 m 5, 0 m 4diay Mains current dissipation at current/speed 5 m 5, 0 m 4diay Mains current dissipation at current/speed 5 m 5, 0 m 4diay Mains current dissipation at current/speed 5 m 5, 0 m 4diay Mains current dissipation at current/speed 5 m 5, 0 m 4diay Mains current dissipation at current/speed 5 m 5, 0 m 4diay Dispertition anop 5, m 5, m 5, 0 m 4diay 5 m 5, 0 m 4diay	Climatic proofing	
Efficiency I to a, Df. Ache Efficiency I S % fo) I the dissipation at current/speed I S % fo) I act dissipation at current/speed I S % fo) I act dissipation at current/speed I S % fo) I act dissipation at current/speed I S % fo) I act dissipation at current/speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act dissipation at current diff speed I S % fo) I act displation at current diff speed I S % fo) I act displation at current diff speed I S % fo) I act displation at current diff speed I S % fo) I act displation at current diff speed I S % fo) I act displation at current diff speed I S % fo) I act displation at current diff speed I S % fo) I act displatin at	Current limitation	
Heat dissipation at current/speed 32.3 W ar 28% current and 0% speed 32.3 W ar 28% current and 0% speed 32.3 W ar 28% current and 0% speed 32.3 W ar 28% current and 0% speed 32.3 W ar 28% current and 0% speed input current UN at 150% overlaad 41.4 Leakag current at grownfed 33 m A Mains current distorion 33 m A Mains switchinon frequency 33 m A Mains switchinon frequency 48.0 W Mains switchinon frequency 38.9 H A Mains switchinon frequency 33 m A Mains switchinon frequency 38.9 H A Mains switchinon frequency 38.9 H A Mains switchinon frequency 38.9 H A Output frequency - max 48.9 V Output frequency - max 50.9 H 2 Rated frequency - max 50.9 H 2 Output frequency - max 50.9 H 2 Rated frequency - max 51.9 K 2 Rated frequency - max 51.9 K 2 Rated frequency - max 51.8 K Rated frequency -	Delay time	
Input current LIA at 150% overload Imput current and 9% speed Input current LIA at 150% overload Imput current and 9% speed Input current LIA at 150% overload Imput current and 9% speed Input current LIA at 150% overload Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max Imput current and 9% speed Mains overload purcent digound IPE - max	Efficiency	98 % (ŋ)
Leakage current at ground IPE - max 35 mA Mains suitch-on frequency 120 % Mains woltage - max 480 V Mains woltage - min 380 - 480 V (-10 %/-10 %, at 5060 Hz) Mains voltage - min 380 - 480 V (-10 %/-10 %, at 5060 Hz) Operating mode 580 - 480 V (-10 %/-10 %, at 5060 Hz) Operating mode 580 - 480 V (-10 %/-10 %, at 5060 Hz) Output frequency - max 500 Hz Output frequency - max 500 Hz Ovarload current IL at 150% sourclead 500 Hz Ovarload current IL at 150% sourclead 50 Hz Rated frequency - min 500 Hz Rated frequency - min 50 Hz Rated frequency - min 51 KW Rated operational current IL (h) 51 KW Rated operational power at 380/400 V, 50 Hz, 3-phase 51 KW Rated operational power at 380/400 V, 50 Hz, 3-phase 50 Hz Rated operational power at 380/400 V, 50 Hz, 3-phase 50 Hz Rated operational power at 480/400 V, 50 Hz, 3-phase 60 Hz Sutting current - max 50 Mz Sutting frequency 50 Hz Sutting current - max	Heat dissipation at current/speed	33.2 W at 25% current and 50% speed 35.2 W at 50% current and 90% speed 36.2 W at 50% current and 0% speed 37.6 W at 50% current and 50% speed 46.3 W at 100% current and 90% speed 48.7 W at 100% current and 0% speed
Mains current distortion 120 % Mains voltage - max 480 V Mains voltage - max 800 V Mains voltage - min 300 - 400 V (-10 %/-10 %, at 50(60 Hz) Mains voltage tolerance 300 - 400 V (-10 %/-10 %, at 50(60 Hz) Operating mode 300 - 400 V (-10 %/-10 %, at 50(60 Hz) Output frequency - max 300 - 400 V (-10 %/-10 %, at 50(60 Hz) Output frequency - max 500 Hz Output frequency - min 500 Hz Overload current 50 Hz Overload current (La 150% overload) For 60 s every 600 s Rated frequency - min For 60 s every 600 s Rated operational current (Le) 55 A Rated operational current (Le) 53 A at 150% overload (at an operating frequency of 8 KHz and an ambient air temperature of +40 °C) Rated operational power at 380:400 V, 50 Hz, 3 phase 66 Hz Rated operational power at 380:400 V, 50 Hz, 3 phase 60 VAC, 3 phase Starting current + max 500 Hz Supply frequency 500 Hz Supply frequency 500 Hz Supply frequency 500 Hz Supply frequency 500 Hz <t< td=""><td>Input current ILN at 150% overload</td><td>4.1 A</td></t<>	Input current ILN at 150% overload	4.1 A
Mains witch-on frequency Maximum of one time every 60 seconds Mains voltage - max 480 V Mains voltage rolerance 300 V Operating mode Standard Life Augustance Output frequency - max Standard Life Augustance Output frequency - max 01/2 Rated frequency - max 61/2 Rated frequency - max 61/2 Rated operational current (le) 15.5 W Rated operational power at 380/400 V, 50 Hz, 3-phase 61/2 Rated operational voltage 61/2 Starting current - max 61/2 Supply frequency 11/2 (Frequency resolution, stepoint value) Starting current - max 61/2 Supply frequency 61/2 <	Leakage current at ground IPE - max	3.5 mA
Mains voltage - max Mains voltage - min 380 V Mains voltage tolerance 380 - 480 V (-10 %, at 50(60 Hz) Operating mode Semooless vector control (SLV) Buscherse vector control (SLV) Semooless vector control (SLV) Output frequency - max 500 Hz Output frequency - min 500 Hz Overload current Lat 150% overload 65 A Rated frequency - min 65 A Rated frequency - min 61 Hz Rated frequency - min 65 Hz Rated operational current (le) 65 A Rated operational coursent (le) 61 Hz Rated operational voltage 61 Hz Rated operational voltage 15 kW Rated operational voltage 01 Hz (Frequency resolution, stepoint value) Starting current - max 61 Hz Supply frequency 15 kW Supply frequency 61 Hz Supply frequency 50 KDI Hz, 3: phase Assigned motor power at 480(480 V, 60 Hz, 3: phase 61 Hz Supply frequency 15 kLY Supply frequency 50 KDI Hz Supply frequency 50 KDI Hz Supply frequency	Mains current distortion	120 %
Mains voltage min 380 - 480 V (-10 %/+10 %, et 50/60 Hz) Mains voltage tolerance 380 - 480 V (-10 %/+10 %, et 50/60 Hz) Operating mode Sensortess votor control (SLV) BLDC motors Synchronous roluctance motors PM and LSDM motors Output frequency - max 500 Hz Output frequency - min 500 Hz Overload current IL at 150% overload 65 A Rated frequency - min 65 A Rated frequency - min 65 A Rated frequency - min 65 A Rated operational current IL(a) 50 Hz Rated operational current IL(a) 50 Hz Rated operational current IL(a) 65 Hz Rated operational current IL(a) 50 Hz Rated operational current IL(a) 60 Hz Rated operational current IL(a) 60 Hz Rated operational current IL(a) 60 Hz Rated operational voltage 60 Hz Rated operational voltage 00 M, H, max. starting current IL(a) Starting current - max 50 K0 Hz Supply frequency 00 Hz Supply frequency 00 Hz Supply frequency 00 Hz Supply frequency 00 Hz - 2 kbz adjustable, IPWM, P	Mains switch-on frequency	Maximum of one time every 60 seconds
Mains voltage tolerance 380 - 480 V (-10 %/+10 %, at 5008 Hz) Operating mode Sansonless vector control (SLV) BLDE motors Synchronous reluctance motors Output frequency - max 500 Hz Output frequency - min 140 Overload current 608 × 800 f00 S Overload current Lat 150% overload 66 Hz Rated frequency - min 65 A Overload current (IIe) 66 Hz Rated frequency - min 65 Hz Rated frequency - min 45 Hz Rated operational current (IIe) 500 Hz Rated operational current (IIe) 50 Hz Rated operational power at 380400 V, 50 Hz, 3-phase 51 KW Rated operational voltage 60 Hz Starting current - max 50 KB Lz Supply frequency 50 KB Lz Supply frequency 50 KB Lz Supply frequency 50 KB Lz Assigned motor power at 460/480 V, 50 Hz, 3-phase 50 KB Lz Supply frequency 50 KB Lz Bate disperational voltage 50 KB Lz Bate disperational voltage 50 KB Lz Supply frequency 50 KB Lz	Mains voltage - max	480 V
Operating mode Sensoriess vector control (SLV) BLDC motors Synchronous reluctance motors Output frequency - max 500 Hz Output frequency - min 142 Overload current 142 Overload current 155 K Rated frequency - min 156 A Rated frequency - max 156 A Rated frequency - max 156 A Rated frequency - max 156 Hz Rated frequency - max 156 Hz Rated frequency - min 45 Hz Rated frequency - min 45 Hz Rated frequency - min 45 Hz Rated operational current (le) 15 kW Rated operational current (le) 15 kW Rated operational voltage 15 kW Rated operational voltage 15 kW Rated operational voltage 10 hz (Frequency resolution, setpoint value) Supply frequency 50/60 Hz Supply frequency 50/60 Hz Supply frequency 50/60 Hz Assigned motor power at 460/480 V, 50 Hz, 3-phase 50/60 Hz Assigned motor power at 460/480 V, 50 Hz, 3-phase 50/60 Hz Freaking current </td <td>Mains voltage - min</td> <td>380 V</td>	Mains voltage - min	380 V
Output frequency - max 500 Hz Output frequency - min 500 Hz Output frequency - min 64 9 Output frequency - min 65 A Output frequency - max 65 A Rated frequency - max 65 A Rated frequency - min 45 Hz Rated frequency - min 45 Hz Rated operational current (le) 50 Hkz Rated operational current (le) 15 kW Rated operational power at 380/400 V, 50 Hz, 3-phase 15 kW Resolution 0 Hz (Frequency resolution, setpoint value) Starting current - max 20 % H, Max, starting current (High Overload), For 2 seconds every 20 seconds, Power section, Main circuit Supply frequency 50/00 Hz Supply frequency 50/00 Hz Assigned motor power at 480/480 V, 60 Hz, 3-phase 20 % H, Max, starting current (High Overload), For 2 seconds every 20 seconds, Power section, Main circuit Assigned motor power at 480/480 V, 60 Hz, 3-phase 20 KHz 4- 32 kHz adjustable, FPWM, Power section, Main circuit Supply frequency 8 KHz 4- 32 kHz adjustable, fPWM, Power section, Ma	Mains voltage tolerance	380 - 480 V (-10 %/+10 %, at 50/60 Hz)
Output frequency - min 0 Hz Overload current For 60 s every 600 s Overload current IL at 150% overload 6.5 A Rated frequency - max 6.6 Hz Rated frequency - min 45 Hz Rated operational current (le) 4.3 A at 150% overload (at an operating frequency of 8 kHz and an ambient air temperature of +40 °C) Rated operational power at 380/400 V, 50 Hz, 3-phase 1.5 kW Rated operational voltage 0.1 Hz (Frequency resolution, setpoint value) Starting current - max 0.0 Hz, 4.20 kHz, 4.20 kH	Operating mode	BLDC motors Synchronous reluctance motors PM and LSPM motors
Overload currentFor 60 s every 600 s At 40 °COverload current IL at 150% overload6.5 ARated frequency - max66 HzRated frequency - min45 HzRated operational current (le)3.5 A at 150% overload (at an operating frequency of 8 kHz and an ambient air temperature of +40 °C)Rated operational power at 380/400 V, 50 Hz, 3-phase1.5 kWRated operational voltage0.1 Hz (Frequency resolution, setpoint value)Rated operational voltage0.1 Hz (Frequency resolution, setpoint value)Starting current - max20 %, IH, max. starting current (High Overload), For 2 seconds every 20 seconds, Power sectionSuphy frequencyasigned motor power at 460/480 V, 60 Hz, 3-phaseAssigned motor power at 460/480 V, 60 Hz, 3-phase21 PBraking current20 K, Imax. 6 A for 120 ms), Actuator for external motor brake	Output frequency - max	500 Hz
At 40 °C Overload current IL at 150% overload 6.5 A Rated frequency - max 61 H2 Rated frequency - min 5.5 A Rated operational current (le) 4.3 A at 150% overload (at an operating frequency of 8 kHz and an ambient air temperature of +40 °C) Rated operational power at 380/400 V, 50 Hz, 3-phase 1.5 kW Rated operational voltage 1.5 kW Rated operational voltage 0.1 Hz (Frequency resolution, setpoint value) Starting current - max 0.1 Hz (Frequency resolution, setpoint value) Supply frequency 50/60 Hz Switching frequency 50/60 Hz Assigned motor power at 460/480 V, 60 Hz, 3-phase 1.4 kmax Braking current 6.5 A	Output frequency - min	0 Hz
Overload current LL at 150% overload6.5 ARated frequency - max66 HzRated frequency - min45 HzRated operational current (le)3.8 at 150% overload (at an operating frequency of 8 Hz and an ambient air temperature of +40 °C)Rated operational power at 380/400 V, 50 Hz, 3-phase1.5 kWRated operational voltage0.1 Hz (Frequency resolution, setpoint value)Resolution0.1 Hz (Frequency resolution, setpoint value)Starting current - max0/00 LZSupply frequency50/00 HzSwitching frequency0/00 LZAssigned motor power at 460/480 V, 60 Hz, 3-phase0/00 LZHard operational woltage0/00 LZBraking current6.5 A	Overload current	
Rated frequency - max 66 Hz Rated frequency - min 45 Hz Rated operational current (le) 45 Hz Rated operational power at 380/400 V, 50 Hz, 3-phase 50 KW Rated operational power at 380/400 V, 50 Hz, 3-phase 1.5 kW Rated operational voltage 0.1 Hz (Frequency resolution, setpoint value) Resolution 0.1 Hz (Frequency resolution, setpoint value) Starting current - max 200 %, IH, max. starting current (High Overload), For 2 seconds every 20 seconds, Power section Supply frequency 50/60 Hz Switching frequency 8 kHz 4 - 32 kHz adjustable, fPWM, Power section, Main circuit Assigned motor power at 460/480 V, 60 Hz, 3-phase 200 K, IL, max. starting current (High Overload), For 2 seconds every 20 seconds, Power section Braking current 8 kHz 4 - 32 kHz adjustable, fPWM, Power section, Main circuit Supply frequency 8 kHz 4 - 32 kHz adjustable, fPWM, Power section, Main circuit Basigned motor power at 460/480 V, 60 Hz, 3-phase 20 KL (max. 6 A for 120 ms), Actuator for external motor brake	Overload current IL at 150% overload	
Rated frequency - min 45 Hz Rated operational current (le) 43 A at 150% overload (at an operating frequency of 8 kHz and an ambient air temperature of +40 °C) Rated operational power at 380/400 V, 50 Hz, 3-phase 1.5 kW Rated operational voltage 1.5 kW Resolution 0.1 Hz (Frequency resolution, setpoint value) Starting current - max 0.1 Hz (Frequency resolution, setpoint value) Supply frequency 50/60 Hz Switching frequency 8 kHz, 4 - 32 kHz adjustable, fPWM, Power section, Main circuit Assigned motor power at 460/480 V, 60 Hz, 3-phase 2 HP Braking current 0.5 A (max. 6 A for 120 ms), Actuator for external motor brake	Rated frequency - max	
Rated operational current (le) 4.3 A at 150% overload (at an operating frequency of 8 kHz and an ambient air temperature of 4.40 °C) Rated operational power at 380/400 V, 50 Hz, 3-phase 1.5 kW Rated operational voltage 480 V AC, 3-phase Resolution 0.1 Hz (Frequency resolution, setpoint value) Starting current - max 200 %, IH, max. starting current (High Overload), For 2 seconds every 20 seconds, Power section Supply frequency 50/60 Hz Switching frequency 8 kHz, 4 - 32 kHz adjustable, fPVMM, Power section, Main circuit Assigned motor power at 460/480 V, 60 Hz, 3-phase 2 HP Braking current 6 SA (max. 6 A for 120 ms), Actuator for external motor brake		45 Hz
Rated operational voltage 480 V AC, 3-phase Resolution 0.1 Hz (Frequency resolution, setpoint value) Starting current - max 200 %, IH, max. starting current (High Overload), For 2 seconds every 20 seconds, Power section Supply frequency 50/60 Hz Switching frequency 50/60 Hz Assigned motor power at 460/480 V, 60 Hz, 3-phase 200 % Braking current 60 K E K Braking current 60 K E K	Rated operational current (Ie)	
Resolution 400 V AC, 3-phase Resolution 0.1 Hz (Frequency resolution, setpoint value) Starting current - max 200 %, IH, max. starting current (High Overload), For 2 seconds every 20 seconds, Power section Supply frequency 50/60 Hz Switching frequency 50/60 Hz Assigned motor power at 460/480 V, 60 Hz, 3-phase 200 Y Braking current 400 V AC, 3-phase Braking current 60 Hz	Rated operational power at 380/400 V, 50 Hz, 3-phase	1.5 kW
Starting current - max 200 %, IH, max. starting current (High Overload), For 2 seconds every 20 seconds, Power section Supply frequency 50/60 Hz Switching frequency 8 kHz, 4 - 32 kHz adjustable, fPWM, Power section, Main circuit Assigned motor power at 460/480 V, 60 Hz, 3-phase 21 HP Braking current 6 Control of Contr	Rated operational voltage	
Power section Supply frequency 50/60 Hz Switching frequency 8 kHz, 4 - 32 kHz adjustable, fPWM, Power section, Main circuit Assigned motor power at 460/480 V, 60 Hz, 3-phase 2 HP Braking current 6 A (max. 6 A for 120 ms), Actuator for external motor brake	Resolution	0.1 Hz (Frequency resolution, setpoint value)
Switching frequency 8 kHz, 4 - 32 kHz adjustable, fPWM, Power section, Main circuit Assigned motor power at 460/480 V, 60 Hz, 3-phase 2 HP Braking current 5 0.6 A (max. 6 A for 120 ms), Actuator for external motor brake	Starting current - max	
Assigned motor power at 460/480 V, 60 Hz, 3-phase 2 HP 2 HP 2 Solution 2 Sol	Supply frequency	50/60 Hz
Braking current ≤ 0.6 A (max. 6 A for 120 ms), Actuator for external motor brake	Switching frequency	8 kHz, 4 - 32 kHz adjustable, fPWM, Power section, Main circuit
	Assigned motor power at 460/480 V, 60 Hz, 3-phase	2 HP
	Braking current	≤ 0.6 A (max. 6 A for 120 ms), Actuator for external motor brake
	Braking torque	Adjustable to 100 % (I/Ie), DC - Main circuit

	≤ 30 % (I/Ie)
Braking voltage	280/207 V DC -15 % / +10 %, Actuator for external motor brake
Rated conditional short-circuit current (Iq)	10 kA
Short-circuit protection (external output circuits)	Type 1 coordination via the power bus' feeder unit, Main circuit
Rated control voltage (Uc)	24 V DC (-15 %/+20 %, external via AS-Interface® plug) 180/207 V DC (external brake 50/60 Hz)
Communication interface	AS-Interface
Connection	Plug type: HAN Ω5
Interfaces	Number of slave addresses: 31 (AS-Interface®)
	Specification: S-7.4 (AS-Interface®) Max. total power consumption from AS-Interface® power supply unit (30 V): 190 mA
Cable length	C2 ≤ 5 m, maximum motor cable length C1 ≤ 1 m, maximum motor cable length C3 ≤ 25 m, maximum motor cable length
10.2.2 Corrosion resistance	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements.
10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of assemblies	Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Frequency converter =< 1 kV (EC001857)

Mains voltageV Mains frequency380 - 480Number of phases input50/60 HzNumber of phases output3Number of phases output3Max. output frequencyHzMax. output voltageVNominal output current I2NAMax. output at quadratic load at rated output voltageKWMax. output at linear load at rated output voltageKW					
Mains frequencyModeNumber of phases input3Number of phases output1Max. output frequencyHzMax. output voltageVNominal output current I2NAMax. output at quadratic load at rated output voltageKWMax. output at linear load at rated output voltageKW	Electric engineering, automation, process control engineering / Electrical drive / Static frequency converter / Static frequency converter = < 1 kV (ecl@ss10.0.1-27-02-31-01 [AKE177014])				
Number of phases input3Number of phases output3Max. output frequencyHzMax. output voltageVNominal output current I2NAMax. output at quadratic load at rated output voltageKWMax. output at linear load at rated output voltageKW	Mains voltage	V	380 - 480		
Number of phases outputNumber output	Mains frequency		50/60 Hz		
Max. output frequencyHz500Max. output voltageV500Nominal output current I2NA4.3Max. output at quadratic load at rated output voltageKW1.5Max. output at linear load at rated output voltagekW1.5	Number of phases input		3		
Max. output voltage V 500 Nominal output current I2N A 4.3 Max. output at quadratic load at rated output voltage kW 1.5 Max. output at linear load at rated output voltage kW 1.5	Number of phases output		3		
Nominal output current I2N A 4.3 Max. output at quadratic load at rated output voltage kW 1.5 Max. output at linear load at rated output voltage kW 1.5	Max. output frequency	Hz	500		
Max. output at quadratic load at rated output voltage kW 1.5 Max. output at linear load at rated output voltage kW 1.5	Max. output voltage	V	500		
Max. output at linear load at rated output voltage kW 1.5	Nominal output current I2N	А	4.3		
	Max. output at quadratic load at rated output voltage	kW	1.5		
	Max. output at linear load at rated output voltage	kW	1.5		
Relative symmetric net frequency tolerance % 10	Relative symmetric net frequency tolerance	%	10		

Relative symmetric net voltage tolerance	%	10
Number of analogue outputs		0
Number of analogue inputs		0
Number of digital outputs		0
Number of digital inputs		4
With control element		Yes
Application in industrial area permitted		Yes
Application in domestic- and commercial area permitted		Yes
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		Yes
Supporting protocol for KNX		No
Supporting protocol for Modbus		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for BACnet		No
Supporting protocol for other bus systems		No
Number of HW-interfaces industrial Ethernet		0
Number of interfaces PROFINET		0
Number of HW-interfaces RS-232		0
Number of HW-interfaces RS-422		0
Number of HW-interfaces RS-485		1
Number of HW-interfaces serial TTY		0
Number of HW-interfaces USB		0
Number of HW-interfaces parallel		0
Number of HW-interfaces parallel		1
With optical interface		No
With Optical Interface With PC connection		Yes
		No
Integrated breaking resistance		
4-quadrant operation possible		No
Type of converter		U converter
Degree of protection (IP)		IP65
Degree of protection (NEMA)		12
Height	mm	270
Width	mm	220
Depth	mm	157