

850 V

AUXILIARY INVERTER

- + Perfect match for power steering pump, hydraulic pump, brake compressor and HVAC
- + Developed according ISO 26262
- + Sensorless vector control
- + Any motor type supported, proven for induction motor and permanent magnet synchronous motor
- + Up to 65 °C coolant temperature w/o derating

REFUdrive

RPCS 740-2x17K

Drives two motors independently of each other in sensorless operation

www.refu-drive.com



POWER DATA

AC output power @ 650 V DC	2 x 17 kVA
Nominal DC voltage	650 V
DC input voltage range	200 – 850 V
max. AC output voltage @ 3 AC	0 – 500 V
Recommended motor power @ 4 kHz	2 x 15 kW
Rated current @ 4 kHz	2 x 25 A
Peak current for 10 s @ 4 kHz	2 x 45 A
Peak current for 60 s @ 4 kHz	2 x 37.5 A
Peak current for 120 s @ 4 kHz	2 x 32.5 A
Peak current for 240 s @ 4 kHz	2 x 28.7 A
Output frequency	0 – 599 Hz (optional up to 1,600 Hz)
Control supply voltage	9 – 36 V
Ambient temperature	-40 to 85 °C (beyond 50 °C with derating)
Coolant temperature	-40 to 65 °C
Altitude	max. 4,000 m a.s.l.

CONTROL HARDWARE

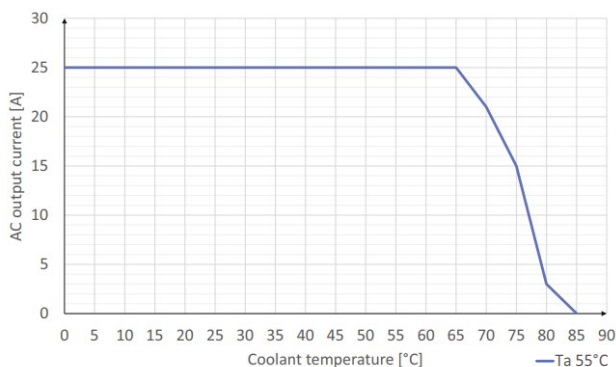
Digital I/O	4
Service interface	CANopen / SAE J1939
Communication interface	CANopen / SAE J1939
Motor temperature control	PTC, PT1000

MECHANICAL DATA

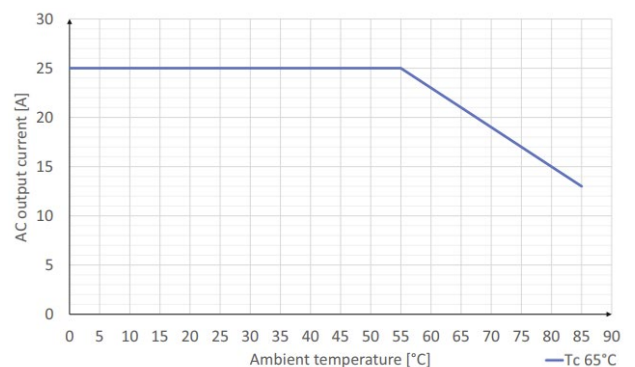
Dimensions w/o connectors [L x W x H]	300 x 391 x 85 mm
Weight	< 10 kg
Degree of protection	IP6K9K
Type of cooling	Liquid: water-glycol

GENERAL DATA

User Interface	REFUdriver software tool
Electromagnetic compatibility	UN ECE R10, AIS004-Part3
Safety	ECE R100, ISO 6469-3, EN 61800-5-1, developed according ISO 26262
Protective functions	Short circuit, earth fault, over current, voltage and temperature monitoring, motor temperature monitoring
Configurations	Motor inverter, generator inverter, on-board power supply
Cable connection	Plug
Generals	Active discharge 0.5 sec., sensorless vector control



Output current at various cooling temperatures
(V_{DC} = 650 V, coolant flow rate = 15 l/min, 4kHz)



Output current at various ambient temperatures
(V_{DC} = 650 V, coolant flow rate = 15 l/min, 4kHz)

+ APPLICATIONS

- Commercial vehicles
- Public transportation
- Municipal vehicles
- Construction equipment
- Agricultural machines
- Port equipment