



850 V

REFUdrive

DUAL INVERTER

- + Perfect match for small and medium size mobile machines
- + Enables traction and auxiliary drives
- + Highest protection class
- + 2x AC units up to 55 kVA in one box
- + Suits to induction and synchronous motors as well as to IPMSM machines

REFUdrive

RPCS 730-2x28K / -2x55K

For all applications: charge, drive, generate, and convert

www.refu-drive.com



POWER DATA

AC output power @ 570 V DC	2 x 28 kVA	2 x 55 kVA
Nominal DC voltage	750 V	
DC input voltage range	300 – 850 V	
max. AC output voltage @ 3 AC	500 V	
Rated current @ 4 kHz	2 x 40 A	2 x 80 A
Peak current for 60 s @ 4 kHz	2 x 48 A	2 x 120 A
Peak current for 1 s @ 4 kHz	2 x 60 A	2 x 160 A
Output frequency	0 – 599 Hz (optional up to 1,200 Hz)	
Control supply voltage	24 V DC (± 20 %) optional 12 V DC (± 20 %)	
Ambient temperature	-25 to 85 °C (beyond 45 °C with derating)	
Coolant temperature	-25 to 55 °C	

CONTROL HARDWARE

Analog I/O	2x IN (± 10 V or ± 20 mA) and 2x OUT (± 5V, max. 5 mA)
Digital I/O	4x IN / 4x OUT / 4x IN/OUT
Service interface	RS485
Communication interface	CANopen / SAE J1939
Motor temperature control	PTC, PT1000, KTY
Encoder system	Encoder (HTL, TTL, sine/cosine encoder), resolver
Resolver input voltage	7 V _{rms}
Transformation ratio for resolver	0.286 or 0.5

MECHANICAL DATA

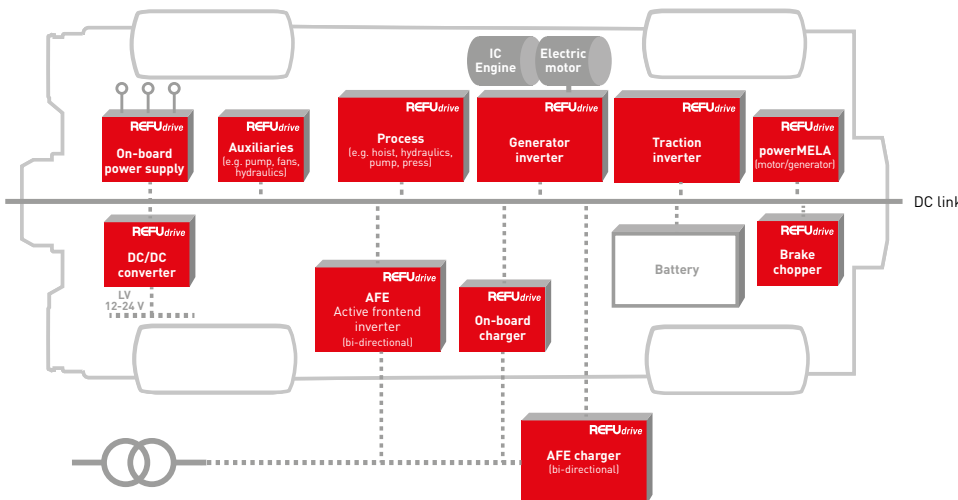
Dimensions w/o connectors [L x W x H]	354 x 300 x 105 mm	363 x 310 x 110 mm
Weight	7.5 kg	11.5 kg
Degree of protection	IP65, IP67 (as option IP68 and IP6K9K)	
Type of cooling	Liquid: water-glycol	

GENERAL DATA

User Interface	REFUdriver software tool
Electromagnetic compatibility	UN ECE R10, EN 61800-3
Device protection	Short circuit, earth fault, over current, voltage and temperature monitoring, motor temperature monitoring
Configurations	Motor inverter, generator inverter, DC-DC converter, charging devices, on-board power supply
Cable connection	HV: gland / LV control: plug

Safety functions and E1 marking are available as an option

POWERFUL DRIVE SOLUTIONS FOR E-MOBILITY



+ APPLICATIONS

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