



**REFUdrive**

### **SINGLE / COMBI INVERTER**

- + Simplifying system solutions
- + Less effort for cooling
- + Saves hardware costs
- + Suitable for lead-acid or lithium-ion 24 V / 12 V batteries
- + Stackable for more charging power
- + Battery voltage controllable via CAN setpoint

**REFUdrive**

**RPCS 730-17K / -17K3K / -28K / -28K4K**

Perfect match: drive, generate and charge low voltage

[www.refu-drive.com](http://www.refu-drive.com)



### POWER DATA

AC output power @ 570 V DC	17 kVA	17 kVA	28 kVA	28 kVA
DC output power	-	3.4 kW / 24 V ±15% / 125 A (optional 1.5 kW / 12 V ± 15% / 125 A)	-	4.6 kW / 24 V ±15% / 167 A (optional 2.3 kW / 12 V ± 15% / 167 A)
Nominal DC voltage	750 V			
DC input voltage range	450 – 850 V			
max. AC output voltage @ 3 AC	500 V	500 V	500 V	500 V
Rated current @ 4 kHz	25 A	25 A	40 A	40 A
Peak current for 60 s @ 4 kHz	27 A	27 A	48 A	48 A
Peak current for 1 s @ 4 kHz	30 A	30 A	80 A	80 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 50 °C		-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) or HVIL (plug-version)			
Digital I/O	4x IN / 4x OUT / 4x IN/OUT			
Service interface	RS485			
Communication interface	CANopen / SAE J1939			
Motor temperature control	PTC, PT1000, KTY, NTC10K			
Encoder system	as option	as option	Resolver, HTL, TTL, sine/cosine encoder	as option
Resolver input voltage	-	-	7 V <sub>rms</sub>	-
Transformation ratio for resolver	-	-	0.286 or 0.5	-

### MECHANICAL DATA

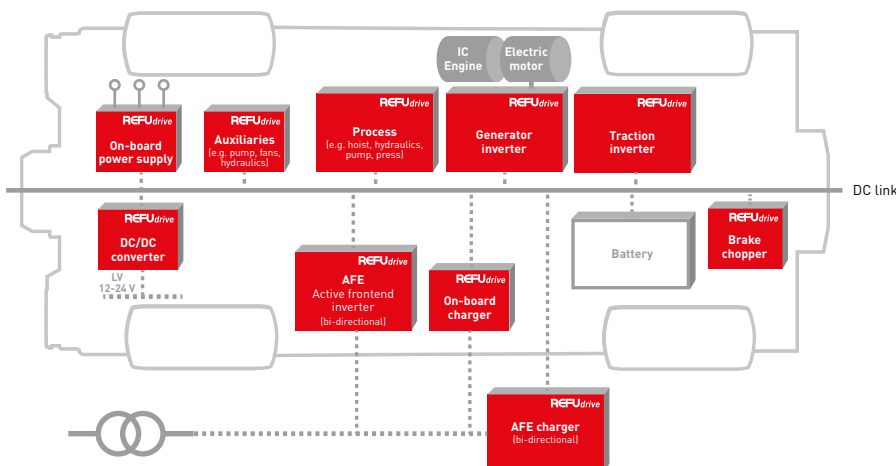
Dimensions w/o connectors [L x W x H]	324 x 306 x 146 mm	325 x 427 x 148 mm	354 x 300 x 105 mm	325 x 443 x 111 mm
Weight	7.5 kg	15.5 kg	7.5 kg	15.5 kg
Degree of protection	IP67 (IP6K9K as option)			
Type of cooling	Air	Air	Liquid: water-glycol	
Rated volume flow	100 m³/h	400 m³/h	6 - 8 LPM	

### GENERAL DATA

User Interface	REFUdriver software tool
Electromagnetic compatibility	UN ECE R10, EN 61800-3
Protective functions	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	Plug or cable gland

Safety functions and E1 marking are available as an option

### POWERFUL DRIVE SOLUTIONS FOR E-MOBILITY



### + APPLICATIONS

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