



**850 V**

### TRACTION INVERTER

- + Highest degree of protection and reliability
- + Flexible and individual configurations
- + Proofed for harshed conditions
- + Highest performance at maximum ambient and coolant temperature
- + Suits to all types of motors

**REFU**drive

**RPCS 730-150K / -320K**

The powerful inverter for all drive applications

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



**POWER DATA**

AC output power @ 570 V DC	150 kVA	320 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	215 A	460 A
Peak current for 60 s @ 4 kHz	451 A	598 A
Peak current for 1 s @ 4 kHz	-	690 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)	-25 to 85 °C (beyond 65 °C with derating)
Coolant temperature	-25 to 55 °C	-25 to 65 °C

**CONTROL HARDWARE**

Analog I/O	1x IN (± 10 V or ± 20 mA) and 1x OUT (± 5V, max. 5 mA)	
Digital I/O	4x IN / 2x OUT / 4x IN/OUT	
Service interface	RS485	
Communication interface	CANopen / SAE J1939	
Motor temperature control	PTC, PT1000, KTY	
Encoder system	Resolver, HTL, TTL, sine/cosine encoder	
Resolver input voltage	7 V <sub>rms</sub>	
Transformation ratio for resolver	0.286 or 0.5	

**MECHANICAL DATA**

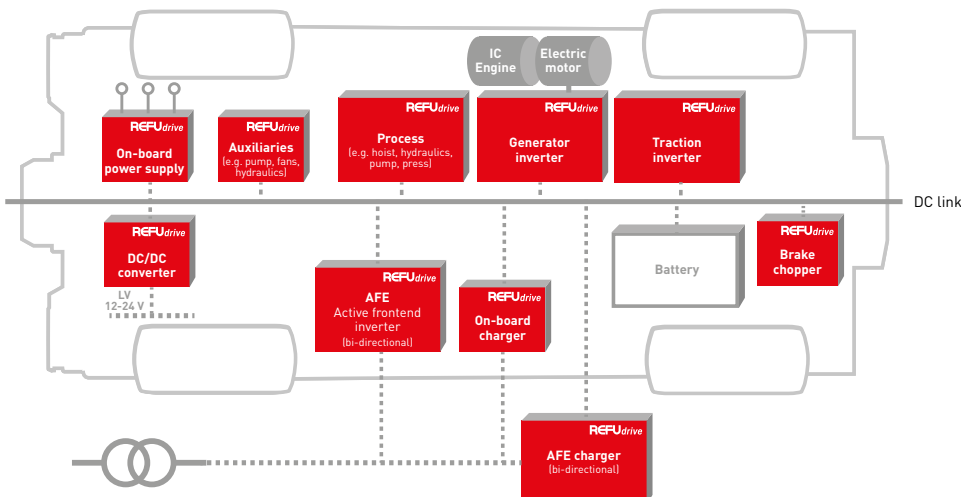
Dimensions w/o connectors [L × W × H]	425 × 320 × 143 mm	506 × 552 × 150 mm
Weight	22 kg	45 kg
Degree of protection	IP 67 (IP6K9K as option)	
Type of cooling	Liquid: water-glycol	

**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
Functional safety	optional: STO (IEC/EN 61800-5-2), Cat. 3, PL d (EN ISO 13849-1), SIL 2 (IEC /EN 61508)
Configurations	Motor inverter, generator inverter, DC-DC converter, charging devices, on-board power supply
Cable connection	HV: gland or plug / LV control: plug

Further safety functions and E1 marking are available as an option

**POWERFUL DRIVE SOLUTIONS FOR E-MOBILITY**



**+ APPLICATIONS**

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