





Description

The 250W ACR series is a range of medium power inverters that provide a 230Vac true sinewave output with very low distortion. Designed for connection directly to the train auxiliary supply, the inverters incorporate surge and transient filtering ensuring compliance with both the traditional and latest rail specifications and norms for protection and EMC. The rugged construction and various mounting options ensure compliance with vibration and shock requirements.

Special features include:

· True sinewave output

- · Very low distortion
- 250W continuous output power (400W peak)
- Protected to IP65

Input specifications

The following input voltages versions are available as standard:

110V (66.0 - 137.5V) dc (Suffix A) 72V (43.2 - 90.0V) dc (Suffix D) 52V (31.2 - 65.0V) dc (Suffix C) 36V (21.0 - 50.4V) dc (Suffix F) 24V (16.8 - 33.6V) dc (Suffix B)

Parameter	Detail
Input Ripple	To EN50155
Input Protection	Reverse polarity protection. Surges and transients EN50155
Inrush Current	Limited to typically 5 x nominal current (after 0.1ms)
Efficiency	75% to 85% dependent on voltage combinations
Hold up time	10mg to ENEGLES 2017 Class \$2 72\/ \$. 110\/ models only (All models most \$2 to ENEGLES 2007)

Output specifications

Maximum Output Power 250W continuous 400W peak (for 15 seconds) Output Voltage 230Vac Setting Tolerance ±0.6% at 50% load, 15°C to 25°C Output frequency 50Hz Frequency Tolerance ±2%	Parameter	Detail	
Setting Tolerance ±0.6% at 50% load, 15°C to 25°C Output frequency 50Hz Frequency Tolerance ±2%	Maximum Output Power	250W continuous 400W peak (for 15 seconds)	
Output frequency 50Hz Frequency Tolerance ±2%	Output Voltage	230Vac	
Frequency Tolerance ±2%	Setting Tolerance	±0.6% at 50% load, 15°C to 25°C	
	Output frequency	50Hz	
Wayoform Truo Sinowayo	Frequency Tolerance	±2%	
vvaveioiii iiue Siliewave	Waveform	True Sinewave	



Output specifications (Continued)

Parameter	Detail	
Harmonic Distortion	<1.5%	
Output Current	1.1A continuous, 1.	7 for 15 seconds
Line & Load Regulation	±5.0% combined	
Temperature Coefficient	<0.02% / °C	
Output Ripple	Typically 5% Pk-Pk	of Output Voltage
Short circuit protection		antaneously if output power exceeds 15A cation provided. Reset by power-down,
Delayed current limit		or trut power exceeds approximately 275W or 20 seconds. LED indication provided. wn, power-up.
Thermal Protection	Output shuts off wh temperature is exce	nen safe internal eeded. Auto recovery.
	Input to Output	1.0kV ac (tested at 1.5kV dc)
Isolation	Input to Case	1.0kV ac (tested at 1.5kV dc)
	Output to Case	1.0kV ac (tested at 1.5kV dc)
Indicators	Input OK Output OK Lock out Over-current latch	Green LED Green LED Red LED Red LED

Environmental details

Parameter	Detail	
Operating Temperature	-25°C to +55°C (no derating)	
Storage Temperature	-40°C to +85°C	
Cooling	By convection	
Relative Humidity	99% max.	
Shock & Vibration	EN 50155 (EN 61373)	
Environmental Protection	IP65	

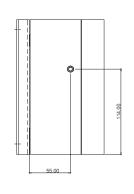
Applicable norms

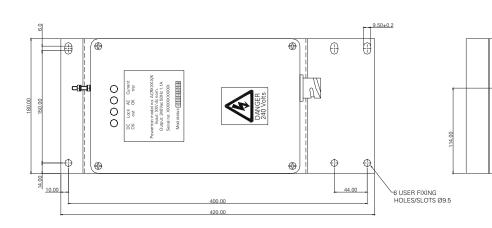
Parameter	Detail
EMC	RIA 12, EN50155 (2017), EN50121-3-2 (2016)
Other	EN50155 (2017), LUL G6621, EN45545-2 (2020)

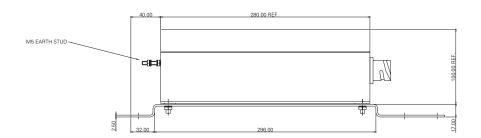
Mechanical characteristics

Detail	
Fully enclosed in sealed diecast aluminium case	
Length = 280mm Width = 180mm Height = 100mm (Dimensions exclude base plate and connector)	
<6.5kg (5kg excluding mounting plate)	
Input and output via circular bayonet connector (shell size 18-11), earth via M5 stud	
Base plate allows surface mounting via six ø 9.5mm fixing holes. Other base plates available upon request.	

Technical drawing







Connector part numbers: Litton: FRCIR02R18-11PF80T12 AB: ABCIRH00A18-11PCNF80P3

45.00

Pin Configuration:

A: -Ve dc Input B: +Ve dc Input C: Line D: Neutral E: Not used

NOTES:

BASE PLATE 2.5mm MILD STEEL PAINT FINISH: RAL 7001 SILVER GREY





