

- ≤ 2 W
- ≤ 5 W
- ≤ 8 W
- ≤ 12 W
- ≤ 15 W
- ≤ 25 W
- ≤ 35 W
- ≤ 50 W
- ≤ 100 W
- ≤ 150 W
- ≤ 200 W
- ≤ 300 W
- ≤ 500 W
- ≤ 750 W
- ≤ 1 kW
- ≤ 1.5 kW
- ≤ 2 kW
- ≤ 2.5 kW
- ≤ 3 kW
- ≤ 5 kW
- ≤ 7.5 kW
- ≤ 10 kW
- ≤ 15 kW
- ≤ 20 kW
- others

- A
- B
- C
- D
- E
- F
- G
- H
- I
- K
- L
- M
- N
- O
- P
- Q
- R
- S
- T
- U
- V
- W
- X
- Y
- Z

Input voltage Vi nom:

- 12 V_{DC} Auto
- 24 V_{DC} Bus, Industry, Railcar
- 28 V_{DC} Military, Avionics
- 36 V_{DC} Railcar
- 48 V_{DC} Data- Tel. Communication
- 72/74 V_{DC} North Americ. Locomotives
- 110 (95) V_{DC} Electromotive, Rail, Train
- 110 V_{AC} North America / Japan
- 235 V_{AC} Europe
- 110/235 V_{AC} and V_{DC} Utilities
- 110/235 V_{AC} Global AC

- A
- B
- M
- R
- C
- D
- E
- F
- H
- U
- G

Input voltage range

- ± 10 % Narrow
- 1:2 Standard e.g. 18...40, 36...75
- 1:3.1 Traction 1:3.1, EN50155
- 1:5 Traction Wide input
- 1:10...1:12 + Traction Extra Wide
- Global AC with DC input 1:3.3 IEC60950
- 1:4 Communication 18...75

- N
- S
- T
- W
- E
- G
- C

Number of outputs is direct readable:

Voltage(s) output 1...x output(s)

in full figures: 0.8...to any voltage V

Operational ambient temperature range T_A:

- 0 to +50 °C
- 25 to +55°C according EN50155, page 9
- 40 to +55°C
- 25 to +71°C
- 40 to +71°C EN50155, X replaced by number
- 25 to +85°C
- 40 to +85°C
- other, tbd

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7...-9

Options next page

Options:

Output voltage adjust (auxiliary function)	* R	
Out OK output signal	* D	
Current sharing	C	
Inhibit on secondary side	* I	
Sense line(s)	* S	
Shut down, enable on primary side	E	
Synchronisation of switching frequency	Q	
Base Plate	B	
Heat sink 20 mm	K	
Heat sink 25 mm	L	
Heat sink 30 mm	M	
Heat sink 35 mm	O	
Heat sink 40 mm	P	
Heat sink 45 mm	Q	
Heat sink 50 mm	R	

Customer-specific models use letter C followed by a four digit Project Nr. at the end of the usual Type designation.

- * 1 & 5: Option S excludes option R (output voltage adjustment)
- * 2 & 3: Option D and option I can exclude each other.
- * 5 Available for 3.3V and 5... 5.1 V outputs only.

Example: KEE5.1/12/24-3RDESB: DC-DC converter, input voltage range 13.8...168 VDC, 3 isolated, independent regulated and infinit short circuit prove outputs providing 5 V_{DC}, 12 V_{DC} 24 V_{DC}, -25 to 71°C, with R, Vout1 adjustment, D, out OK signal, E, shut down, enable on primary side, S sense line on the 5.1 V output and B base plate.

Note: All types feature the following auxiliary functions, which are not shown in the type designation: input and output filters, green input OK, green Output OK and amber input under-over-voltage, over temperature, enable, inhibit and shut down LED indicators.

Product Marking

Basic type designation, applicable safety approval and recognition marks, CE mark, warnings, pin allocation, company logo, specific type designation, input voltage range, nominal output voltage(s) and output current(s), degree of protection, batch no., serial no. and data code including production site, modification status and date of production. Identification of all LEDs.

*Example: not enough pins with the H 15 connector, for the time being good enough as a self-explaining illustration.