

Anderson Power Products' family of Euro Battery Connectors (EBC) exceeds all the requirements of DIN 43589-1 and EN 1175-1. The connector design incorporates an innovative, cost effective contact carrier for ease of assembly.

The connectors have a Degree of Protection of IP23 per IEC 60529. The acid resistance and temperature range of the PBT-PC housing exceeds the requirements of EN 1175-1. Contacts are pure copper with silver plate for maximum conductivity.

All materials meet RoHS requirements and are selected to ensure years of reliable service under adverse battery environments.

Features

- Sturdy advanced polymer housings**

PBT-PC alloy housings provides superior resistance to acids and temperature extremes

- DIN 43589-1 voltage keying**

Dry-cell, wet-cell & universal keying plugs coded for 24 / 36 / 48 / 72 / 80 & 96 volts DC

- Mating compatibility with connectors of other manufacturers**

APP "E" series connectors offer dimensional compatibility for air tube and auxiliary contacts over and above the DIN 43589-1 compatibility of housings and main contacts



- Silver plated pure copper contacts**
For lowest voltage drop and superior performance

SPECIFICATIONS

Electrical			Mechanical	
Current Rating (Amperes) *			Life	
UL	160		a. No Load (mating cycles)	>5000
EN1175-1:1998	140		b. Under Load (Hot Plug 5 mating cycles @96V)	200A
CSA	120			
Voltage Rating			Average Mating / Unmating Force (lbf)	12
UL / CSA	600		(N)	53
EN1175-1:1998	150		Degree of Protection	IP23
Wire Range			Acid Resistance	1.38g / cm ³
- Power Contacts - AWG (mm ²)	#8 to #2 (10 / 35)		Contact Retention - minimum (lbf)	100
- Auxiliary Contacts - AWG (mm ²)	#18 to #14 (1.5 / 2.5)		(N)	445
Dielectric Withstanding Voltage (AC)	2,200		Air Tube Rating	2 bar
Average Contact Resistance (micro-ohms)	65			
Operating Temperature (°C)	-25° to 105°			
(°F)	-13° to 221°			
			Materials	
			Housing	PBT/PC blend, glass filled
			Contacts	Copper alloy, silver plate
			Hardware	Steel, zinc chromate plate

* Current derating curves must be observed as current capacity will vary dependent on wire cross section and ambient temperature. Maximum current carrying capacity is measured at 40°C / 104°F using the maximum wire cross section permissible, crimped to contacts using APP recommended tooling.

ORDERING INFORMATION

Connector Part Number Selection

Series	Gender	Main Contact	Handle	Coding Key	Auxiliary Contacts & Air Tubes	Packaging	
E80	5	25	-	1	0	2	9
5	Socket						9 Individual
00	None - Order Separately				0	None	8 Bulk
10	10 mm² / #8 AWG				1	(2) Lower Auxiliary Contacts	
16	16 mm² / #6 AWG				2	(2) Upper Auxiliary Contacts	
25	25 mm² / #4 AWG				4	(2) Lower Auxiliary Contacts & (2) Upper Auxiliary Contacts	
35	35 mm² / #2 AWG				0	Grey, Wet Cell	
0	No				2	Green, Dry Cel	
1	Black				3	Yellow, Universal	
2	Red						

Accessories

Part Number	Description
E80-21	Twin air tube
E80-89	Handle kit

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www.andersonpower.com

ORDERING INFORMATION

Tooling

Part

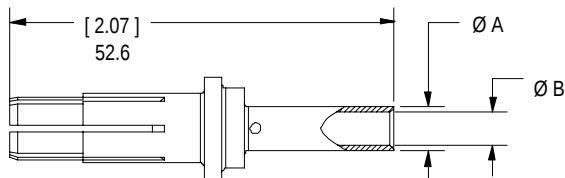
Number	Description
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

Note: For tooling die information, see tooling chart on website.

DIMENSIONS

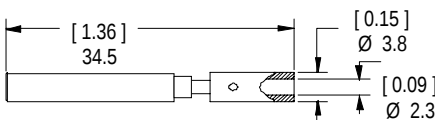
Socket Contact

Part Number	- Wire - mm ² AWG	- ØA - mm in.	- ØB - mm in.
80-1110	10 #8	6.1 0.24	4.6 0.18
80-1116	16 #6	8.4 0.33	6.1 0.24
80-1125	25 #4	10.9 0.43	7.9 0.31
80-1135	35 #2	12.4 0.49	8.9 0.35



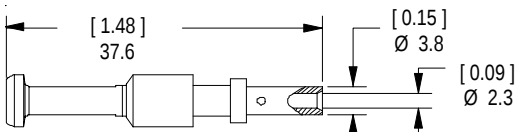
Upper Auxiliary Contact

E80-33 upper auxiliary contact for 1.5 mm² / 2.5 mm² (#18 / #14 AWG)

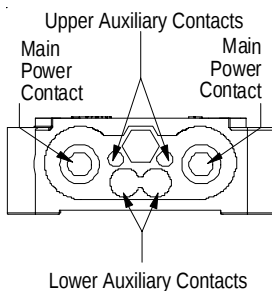


Lower Auxiliary Contact

E80-31 lower auxiliary contact for 1.5 mm² / 2.5 mm² (#18 / #14 AWG)

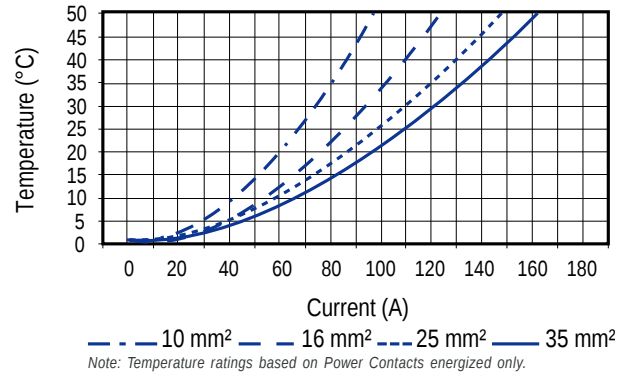


Housing Front View

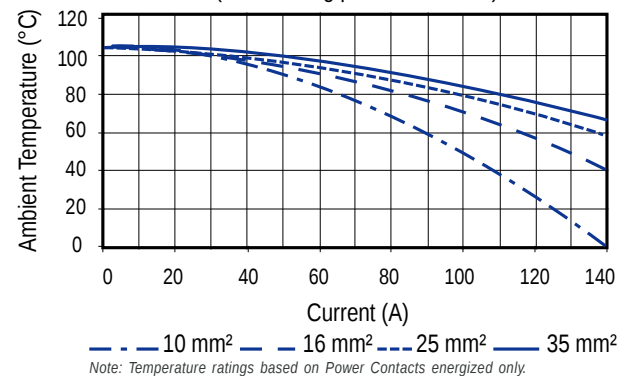


TEMPERATURE CHARTS

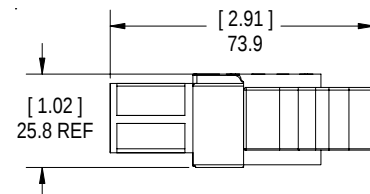
E80 EBC
Temperature Rise



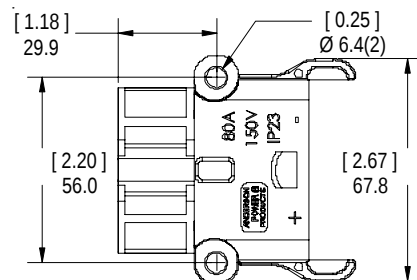
E80 EBC Derating Curve
(0.8 Derating per IEC 60512-3)



Housing Side View



Housing Top View



File No. E26226 All Data Subject To Change Without Notice

DS-E80EBCF REV07

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