

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°	Materials	
(°F)	-13° to 221°	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 mm ² / #8 AWG				1 (2) Lower Auxiliary Contacts	
16	16 mm ² / #6 AWG				2 (2) Upper Auxiliary Contacts	
25	25 mm ² / #4 AWG				4 (2) Lower Auxiliary Contacts &	
35	35 mm ² / #2 AWG				(2) Upper Auxiliary Contacts	
0	No			0 Grey, Wet Cell		
1	Black			2 Green, Dry Cel	5 Air Tube	
2	Red			3 Yellow, Universal	6 Air Tube & (2) Upper Auxiliary Contacts	

Accessories

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

HEADQUARTERS: Anderson Power Products®, 13 Pratts Junction Road, Sterling, MA 01564-2305 USA T:978-422-3600 F:978-422-3700

EUROPE: Anderson Power Products® Ltd., Unit 3, Europa Court, Europa Boulevard, Westbrook, Warrington, Cheshire, WA5 7TN United Kingdom T: +44 (0) 1925 428390 F: +44 (0) 1925 428399

ASIA / PACIFIC: IDEAL Anderson Asia Pacific Ltd., Unit 922-928 Topsail Plaza, 11 On Sum Street, Shatin N.T., Hong Kong T: +(852) 2636 0836 F: +(852) 2635 9036

CHINA: IDEAL Anderson Technologies (Shenzhen) Ltd., Block A8 Tantou Western Industrial Park, Songgang Baoan District, Shenzhen, PR. China 518105 T: (+86) 755 2768 2118 F: (+86) 755 2768 2218

www.andersonpower.com

ORDERING INFORMATION

Tooling

Part

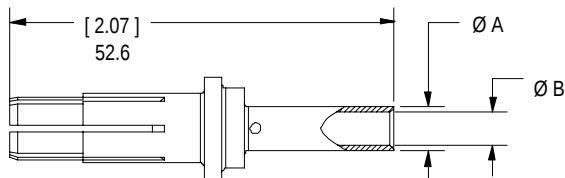
Number	Description
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

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

DIMENSIONS

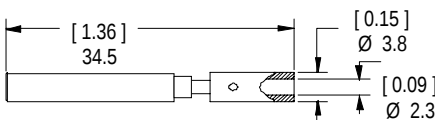
Socket Contact

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



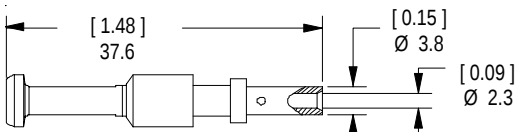
Upper Auxiliary Contact

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

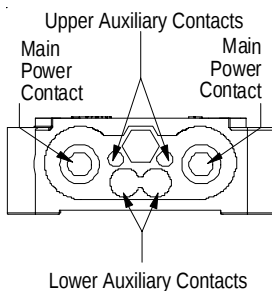


Lower Auxiliary Contact

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

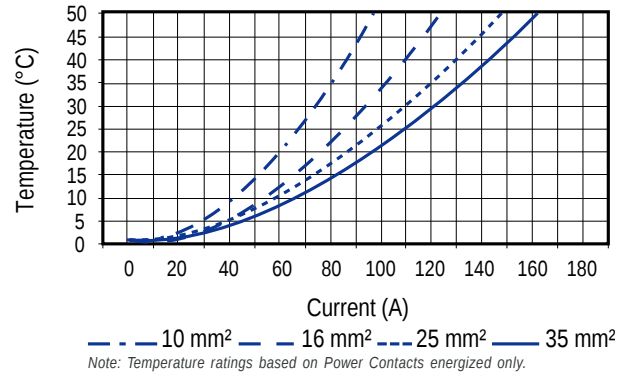


Housing Front View

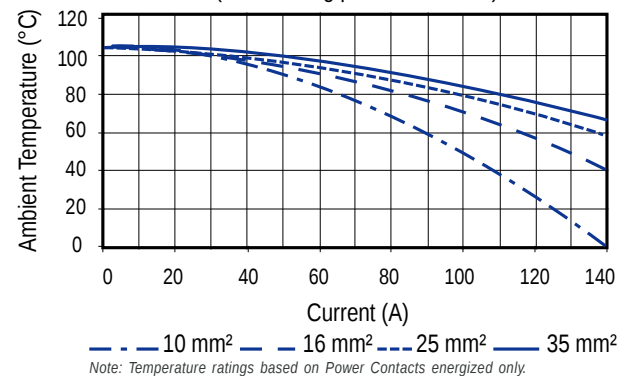


TEMPERATURE CHARTS

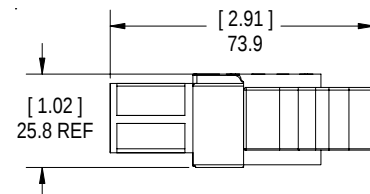
E80 EBC
Temperature Rise



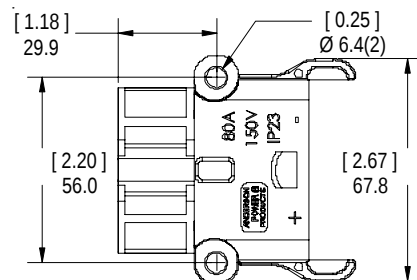
E80 EBC Derating Curve
(0.8 Derating per IEC 60512-3)



Housing Side View



Housing Top View



File No. E26226 All Data Subject To Change Without Notice

DS-E80EBCF REV07

HEADQUARTERS: Anderson Power Products®, 13 Pratts Junction Road, Sterling, MA 01564-2305 USA T:978-422-3600 F:978-422-3700

EUROPE: Anderson Power Products® Ltd., Unit 3, Europa Court, Europa Boulevard, Westbrook, Warrington, Cheshire, WA5 7TN United Kingdom T: +44 (0) 1925 428390 F: +44 (0) 1925 428399

ASIA / PACIFIC: IDEAL Anderson Asia Pacific Ltd., Unit 922-928 Topsail Plaza, 11 On Sum Street, Shatin N.T., Hong Kong T: +(852) 2636 0836 F: +(852) 2635 9036

CHINA: IDEAL Anderson Technologies (Shenzhen) Ltd., Block A8 Tantou Western Industrial Park, Songgang Baoan District, Shenzhen, P.R. China 518105 T: +(86) 755 2768 2118 F: +(86) 755 2768 2218

TAIWAN: IDEAL Anderson Asia Pacific Ltd., Taiwan Branch, 4F-2, No.116, Dadun 20th St., Situn District, Taichung City 407, Taiwan (R.O.C.) T: +(886) 4 2310 6451 F: +(886) 4 2310 6460

www.andersonpower.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Anderson Power Products:

[E80525-1219](#) [E80416-0049](#) [E80416-2019](#) [E80425-1049](#) [E80500-0008](#) [E80516-0049](#) [E80516-2019](#)