

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	Average Mating / Unmating Force (lbf)	12
Voltage Rating		(N)	53
UL / CSA	600	Degree of Protection	IP23
EN1175-1:1998	150	Acid Resistance	1.38g / cm <sup>3</sup>
Wire Range		Contact Retention - minimum (lbf)	100
- Power Contacts - AWG (mm <sup>2</sup> )	#8 to #2 (10 / 35)	(N)	445
- Auxiliary Contacts - AWG (mm <sup>2</sup> )	#18 to #14 (1.5 / 2.5)	Air Tube Rating	2 bar
Dielectric Withstanding Voltage (AC)	2,200	<b>Materials</b>	
Average Contact Resistance (micro-ohms)	65	Housing	PBT/PC blend, glass filled
Operating Temperature (°C)	-25° to 105°	Contacts	Copper alloy, silver plate
(°F)	-13° to 221°	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 <sup>2</sup> / #8 AWG				1 (2) Lower Auxiliary Contacts	
16	16 mm <sup>2</sup> / #6 AWG				2 (2) Upper Auxiliary Contacts	
25	25 mm <sup>2</sup> / #4 AWG				4 (2) Lower Auxiliary Contacts & (2) Upper Auxiliary Contacts	
35	35 mm <sup>2</sup> / #2 AWG			0 Grey, Wet Cell	5 Air Tube	
0	No			2 Green, Dry Cel	6 Air Tube & (2) Upper Auxiliary Contacts	
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](http://www.andersonpower.com)

## ORDERING INFORMATION

### Tooling

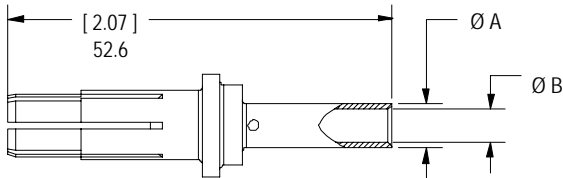
Part Number	Description
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

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

## DIMENSIONS

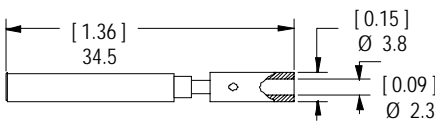
### Socket Contact

Part Number	- Wire -		- ØA -		- ØB -	
	mm <sup>2</sup>	AWG	mm	in.	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



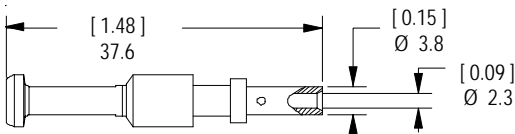
### Upper Auxiliary Contact

E80-33 upper auxiliary contact for 1.5 mm<sup>2</sup> / 2.5 mm<sup>2</sup> (#18 / #14 AWG)

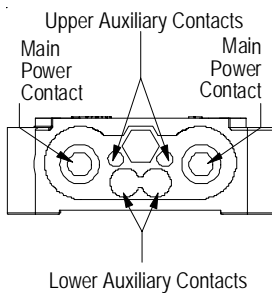


### Lower Auxiliary Contact

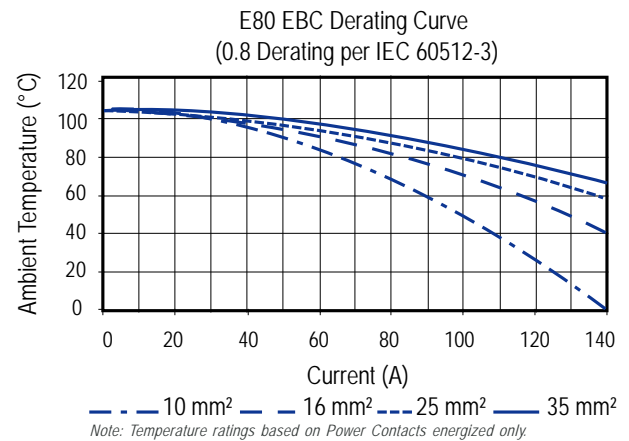
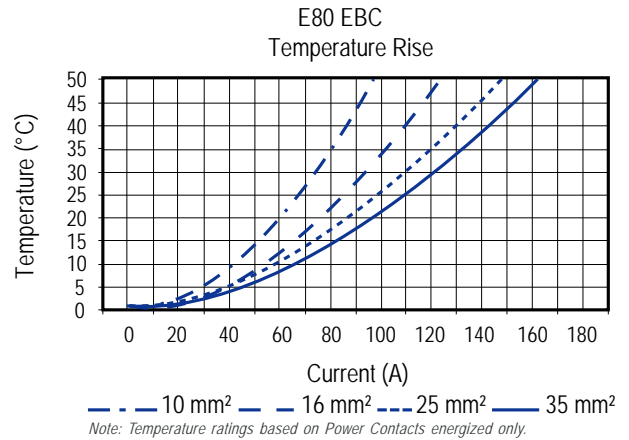
E80-31 lower auxiliary contact for 1.5 mm<sup>2</sup> / 2.5 mm<sup>2</sup> (#18 / #14 AWG)



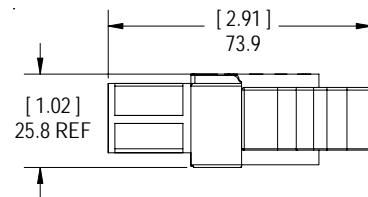
### Housing Front View



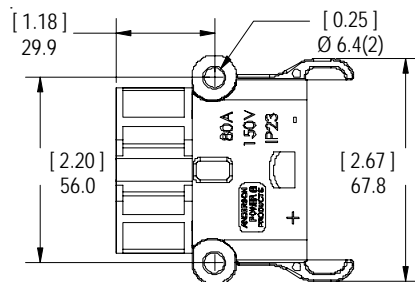
## TEMPERATURE CHARTS



### Housing Side View



### Housing Top View



File No. E26226 All Data Subject To Change Without Notice

DS-E80EBCF REV07

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