Commercial ACPI

Amphenol

DuraEV™

PORTABLE AND FIXED BATTERY CHARGING AND DISCHARGING CONNECTORS

DuraEV™ is a standard connector solution offered with 2 power and 4/6 signal pins which employs a patented contact system that is capable of carrying a continuous current from 15A upto 70A with 10,000 mating cycles. IP67 rated in both mated and unmated conditions (with IP cap on socket side), DuraEV™ has finger protection with first mate last break (FMLB) feature for power terminals, and connector position assurance (CPA) to ensure secure locking. They come with an IP cap for the socket side and an optional IP cap for the plug side to prevent the ingression of foreign materials.



TARGET MARKETS

- 10,000 mating cycles
- 70A continuous current
- IP67 rated in both mated and unmated condition (with IP cap on socket side)
- Finger protection
- PokaYoke to avoid mismating with FMLB for power terminals
- Mechanical Vibration Compliance as per IEC 63066 additionally under load (Rated Current)

FEATURES	BENEFITS
10,000 mating cycles	Highly durable
Upto 70A of rated current	High amperage application
Hybrid 2 Power, 4/6 signal connector	Various range of applications
Employed UL94V–0 rated materials	Ensures application safety
Operating temperature from –20°C to +90°C	Suitable for wide range of application environments
PokaYoke mating	Easy and efficient assembly during mating
Finger protection	Safe for manual handling during everyday use
FMLB (First Mate Last Break) for power terminals	Power sequencing helps for safe plugging
Positive latch and CPA feature	Ensures easy mating/unmating and provides secure locking
Optional IP cap for plug	Prevents ingression of foreign material
Metal bush for panel fastening	Takes torque loads for efficient panel IP sealing

TECHNICAL INFORMATION

MATERIAL

- Housings: PA 66 GF30 and PBT GF30, UL94V-0 rated
- Gasket: Silicone Rubber, UL94-V-0 rated
- O-Ring: Silicone Rubber, UL94-V-0 rated
- IP Cap: PA 66 GF30, UL94V-0 rated
- Lanyard: TPE, UL94V-0 rated
- Plug Terminals: High Performance Cu Alloy
- Socket Terminals: High Performance Cu Alloy

MECHANICAL PERFORMANCE

- Mating Cycles: 10000 cycles
- Operating Temperature Range: -20°C to +90°C
- Temperature Rise: IEC 60512-5-1

ELECTRICAL PERFORMANCE

- Operating Voltage Rating: 120VDC
- Operating Current Rating: 70A (16SQMM)
- Insulation Resistance: >5MΩ
- Dielectric Strength: 500VDC

PACKAGING

- Bulk Packaging

ENVIRONMENTAL

- IP67 Rated
- Random vibration at load and mechanical shock
- Climatic Endurance for Bodies
- Climatic Endurance for Contacts
- Salt Stress Endurance
- Dry Heat for Bodies
- Dry Heat for Contacts

APPROVALS AND CERTIFICATIONS

- UL (employed UL certified material- connector level UL pending)

SPECIFICATION

- Amphenol Application Specification: GS-20-0764
- Tested as per IEC 63066

TARGET MARKETS/APPLICATIONS



EV Charging

PART NUMBER SELECTOR

AU	1016953X	—	J	2	4	C	B	LF

Lead-free

Automotive

Base Number

4	Plug
5	Socket

Rated Current

G	50A
J	70A
K	12A
M	20A
N	15A
P	25A

No of Power Contacts

No of Signal Contacts

4
6

Wire Type

	Size	Current (A)	Reference AWG
A	FLRY-B – 2.5 SQMM	25	14
B	FLRY-B – 10 SQMM	50	8
C	FLRY-B – 16 SQMM	70	6
D	FLRY-B – 1.5 SQMM	15	16
E	FLRY-C – 8 SQMM	50	8

Wire Length

A	0.15M
B	0.20M
C	0.35M
D	0.50M
E	1.00M
F	1.50M
G	2.00M
H	0.60M
J	0.90M
K	0.12M
L	0.55M
M	0.75M
N	1.20M
P	0.30M
Q	0.45M
R	2.25M
S	0.175M
T	1.70M
U	3.00M
V	0.40M
W	0.17M
Y	0.80M
Z	1.75M

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Disclaimer
Please note that the above information is subject to change without notice.