Littelfuse®

NEW **IP67**

Flexible Electrical Center (FLEC™)

The FLEC™ is a configurable power distribution module. It accommodates circuit protection components in a sealed IP67 rated housing with a compact footprint & high component density. Littelfuse offers both standard versions (loaded or unloaded) as well as custom designs. Contact sales for further information on custom made products. The module is also equipped with terminals for plug-in components such as fuses and relays. Power is supplied to the module using three M8 power input studs (100A each). Power is output from the module using standard Delphi GT series sealed connectors that provide up to 76 output circuits for powered accessories.

CAN Flexible Electrical Center (FLEC™)

The CAN FLEC™ has all the same features of the standard FLEC, but it provides the ability to switch relays using the CAN bus system. It also includes relays that are not connected to the CAN bus and can be switched via traditional methods.

Features of all FLEC units

- Tethered cover includes a fuse puller & storage for 4 spare fuses.
- Module is rated to 300A max load.
- Multiple power sources for fuses and relays.
- Vent plug located at the base of the unit.
- Sealed IP67 rated housing for protection from elements.

Part Number	Description	Number of Connectors
FLEC3000Z-0U	Unpopulated PDM 12VDC / 32VDC	6
	Up to 28 x Mini Fuses / Mini Breakers	
	Up to 18 x Micro ISO 280 Relays 5 Pin	
FLEC3000Z-0	Populated PDM 12VDC includes;	6
	28 x Mini Fuses. (6ps x 15A & 22pcs x 30A)	
	18 x Micro ISO 280 12VDC Relays 5 Pin.	
CFLEC001Z-01	Populated Can-Bus PDM 12VDC includes;	5
	29 x Mini Fuses. (8ps x 20A & 21pcs x 30A)	
	12 x Ultra Micro ISO 280 12VDC Relays 4 Pin.	
	3 x Micro ISO 280 12VDC Relays 5 Pin.	

Voltage: See above for corresponding unit.
Rating: Max Load 300A. Max Fuse Rating 30A
Power Input Studs: 3 x 100A rated M8 studs. Plated copper and stainless steel. Red or black covers included.
Power Output Terminals: 38 x 1.5mm blades (15A) & 38 x 2.8mm blades (25A) suit Delphi GT 150 & 280 series sealed plug-in connectors.
Internal PCB: FR4 board with multi-layer high current 6oz copper. Conformal coating available.
Materials: UL94V0 thermoplastic.
Cover: Twist-on design with easy single-handed removal / installation. No latches to break and low over-head clearance requirements. Inside cover features slots for 4 x spare Mini fuses and includes a fuse puller.
Base: Includes vent for pressure equalization.
Ingress Protection Rating: IP67
Cover Gasket: Internal, high temperature silicone.
Connectors: FLEC 6 connectors. *CFLEC 5 connectors.
Custom Layout Component Options: Mini fuses, JTF fuses, MJC fuses, Relays & PCB mount components. Can be designed to accept other components (development/tooling may be required). Internal PCB allows for custom circuit configurations, including designs requiring electronics such as those used in CAN J1939 and LIN systems.
Temperature Rating: -40 °C to +85 °C.
Options: MegaFlex holders can be interlocked to the base for high current protection with a stepped busbar # 882-841. A Mega fuse can be installed across the M8 input studs to pre-fuse multiple circuits in the FLEC. Custom component label or inside cover label.
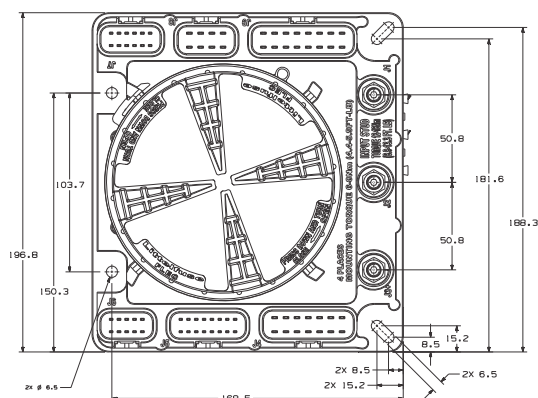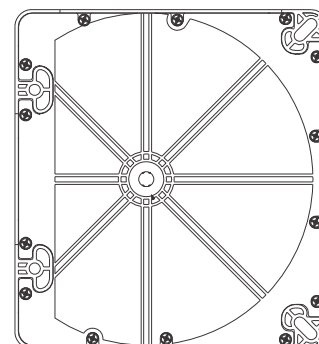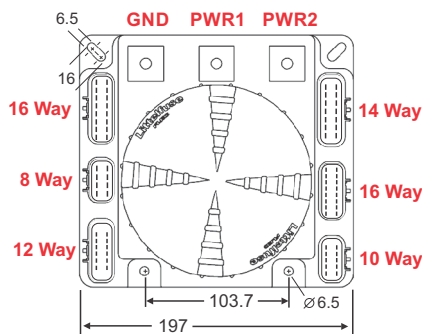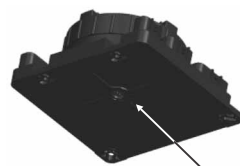**Test Specifications:** SAE, USCAR and ISO.

Twist-on cover with internal silicone gasket. Tether included. Optional custom lid label.

storage for 4 spare fuses

Included fuse puller Optional custom lid label

6 x Delphi GT series sealed connectors using standard 1.5 & 2.8mm terminals

FLEC3000Z-0U Unpopulated

M8 studs for power input & ground. Stud caps to protect from shorts.

Base plate with gasket prevents water intrusion from rear.

FLEC3000Z-0 Includes fuses & relays

Includes vent for pressure equalization.

GND PWR1 PWR2

16 Way   14 Way
8 Way   16 Way*
12 Way   10 Way

103.7
197

Dimensions in MM
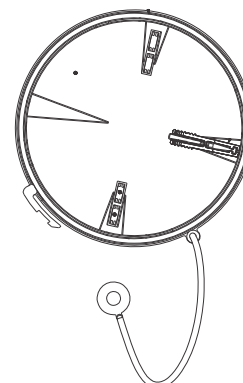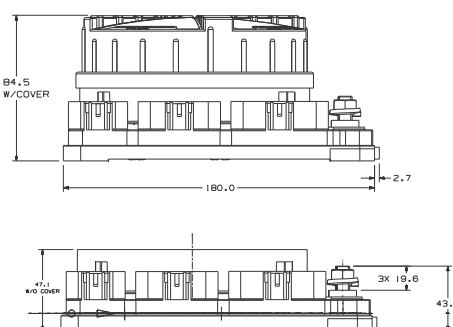
Connectors, Terminals, Cable Seals and Cavity Plugs

ACCESSORIES: DELPHI GT SERIES CONNECTORS

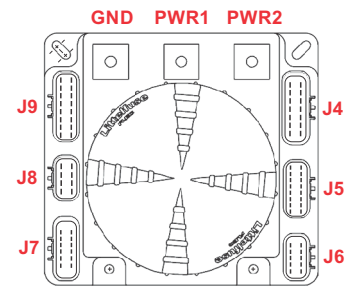| Part Number	Connector	Poles	Suits Module	Terminals
15326842	J6	10	Flec / Can Flec	DELPHI GT 150 (10pcs)
15326849	J7	12	Flec / Can Flec	DELPHI GT 150 (12pcs)
15326863	J5	16	Flec	DELPHI GT 150 (16pcs)
15326654	J8	8	Flec / Can Flec	DELPHI GT 280 (8pcs)
15326917	J4	14	Flec / Can Flec	DELPHI GT 280 (14pcs)
15326666	J9	16	Flec / Can Flec	DELPHI GT 280 (16pcs)

ACCESSORIES: DELPHI GT 150

TERMINALS: TANGED
Female
Tin Brass / Tin plated

CABLE SEALS:
Silicone

CAVITY PLUG:
Silicone

Part Number	Wire (AWG)	Wire (mm²)	Part Number	Cable Dia.(mm)	Colour	Cavity Plugs	Colour
12191818	#22- #20	0.35 - 0.5mm²	15366021	1.2 - 1.9 dia.	White	15305171	Green
12191819	#18 - #16	0.75 - 1.0mm²	15366060	1.86 - 2.4 dia.	Blue		

Note: Delphi GT 150 terminals are rated 15A max.

ACCESSORIES: DELPHI GT 280

TERMINALS: TANGED
Female
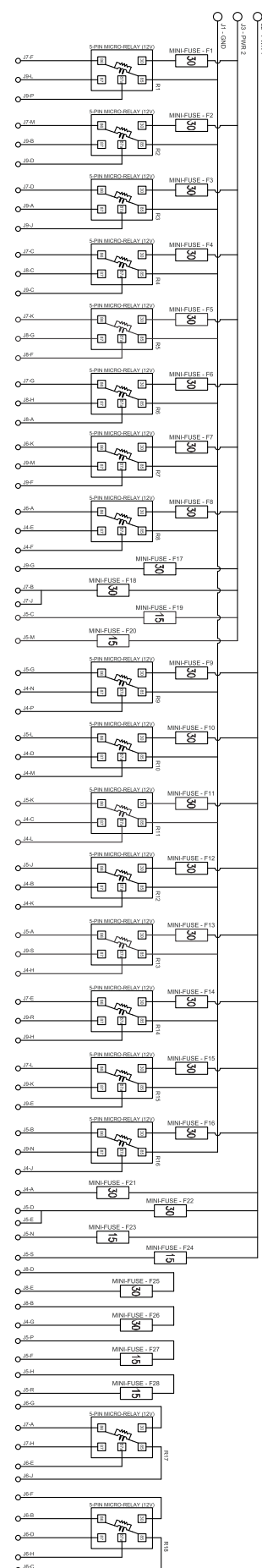Tin Brass / Tin plated

CABLE SEALS:
Silicone

CAVITY PLUG:
Silicone

Part Number	Wire (AWG)	Wire (mm²)	Part Number	Cable Dia.(mm)	Colour	Cavity Plugs	Colour
15304718	#22- #20	0.35 - 0.5mm²	15366065	1.2 - 1.85 dia.	Orange	15305170	White
15304719	#18 - #16	0.75 - 1.0mm²	15366066	1.86 - 2.25 dia.	Yellow		
15304720	#16 - #12	1.5 - 3.0mm²	15366067	2.5 - 3.2 dia.	Tan		
			15336674	2.7 - 3.2 dia.	Blue		
			12191235	3.4 - 3.9 dia.	Purple		

Note: Delphi GT 280 terminals are rated 25A max.

GND PWR1 PWR2

J9 J4
J8 J5
J7 J6

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FLEC3000Z-0, FLEC3000Z-0U Circuit Specifications

J1 — GND — M8 — BLACK CAP

J2 — PWR 1 — M8 — RED CAP

J3 — PWR 2 — M8 — RED CAP

J7 — DELPHI GT 150 SERIES SEALED CONNECTOR: 15326849, CPA: 15317832, CAVITY PLUG: 15305171

J8 — DELPHI GT 280 SERIES SEALED CONNECTOR: 15326654, CPA: 15317832, CAVITY PLUG: 15305170

J9 — DELPHI GT 280 SERIES SEALED CONNECTOR: 15326666, CPA: 15317832, CAVITY PLUG: 15305170

J6 — DELPHI GT 150 SERIES SEALED CONNECTOR: 15326842, CPA: 15317832, CAVITY PLUG: 15305171

J5 — DELPHI GT 150 SERIES SEALED CONNECTOR: 15326863, CPA: 15317832, CAVITY PLUG: 15305171

J4 — DELPHI GT 280 SERIES SEALED CONNECTOR: 15326917, CPA: 15317832, CAVITY PLUG: 15305170

FLEC3000Z-0 REV A

All fuses are MINI style unless otherwise noted.

CFLEC001Z-01 Circuit Specifications

J1 GND.BATTERY

J2 B1.SWITCHED

J3 B2.CONSTANT

INPUT STUD MOUNTING TORQUE 6-8Nm (4.4-5.9Ft-LB)

4 PLACES MOUNTING TORQUE 6-8Nm (4.4-5.9Ft-LB)

301-1C-C-R1

J9 GT-280,2x8,M,SEALED

F11	K1.87
F12	K2.87
F13	K3.87
F14	K4.87
F15	K5.87
F16	K6.87
F17	K6.87a
F18	F10

J8 GT-280,2x4,M,SEALED

F19	F21
F20	K14.87
K15.87	K14.30
K15.87a	K15.30

J7 GT-150,2x6,M,SEALED

CANH	CANL
N/A	N/A
K15.86	K15.85
K14.86	K14.85
K13.86	K13.85
K12.86	K12.85

J4 GT-280,2x7,M,SEALED

K7.87	F24
K8.87	F25
K9.87	F26
K9.87a	F27
F22	F28
F23	F29
K10.87	K10.30

J6 GT-150,2x5,M,SEALED

K11.87	K11.30
K12.87	K12.30
K13.87	K13.30
K10.86	K10.85
K11.86	K11.85

15.2±0.5   166.4   45°

6.5   45°

46.6±0.5   103.7±0.5   196.8   2X Ø 6.5

153.3   180.0   182.7

FUSE	AMPS
F01	20
F02	20
F03	20
F04	20
F05	20
F06	30
F07	20
F08	20
F09	30
F10	30
F11	30
F12	30
F13	30
F14	30
F15	30
F16	30
F17	30
F18	30
F19	30
F20	30
F21	30
F22	30
F23	30
F24	30
F25	30
F26	30
F27	30
F28	30
F29	30

RELAY	TYPE
K01	303
K02	303
K03	303
K04	303
K05	303
K06	301
K07	303
K08	303
K09	301
K10	303
K11	303
K12	303
K13	303
K14	303
K15	301

NO	COMPONENT NO	DESCRIPTION	QTY/M	U/M
13	873-680	COVER TETHER	1	EA
12	923-025-004	M8 STUD CAP-BLACK	1	EA
11	923-025-003	M8 STUD CAP-RED	2	EA
10	900-062	WASHER	3	A
9	903-096	NUT	3	EA
8	02040080Z	4 PIN MINI-MIRCO RELAY	12	EA
7	02040090Z	5 PIN MIRCO RELAY(12V)	3	EA
6	003297	COVER LABEL	1	EA
5	0297030.WXNV	30A MINI FUSE	25	EA
4	0297020.WXNV	20A MINI FUSE	10	EA
3	00970032Z	FUSE PULLER	1	EA
2	901-313	COVER GASKET	1	EA
1	873-710	COVER	1	EA

J3 B2.CONSTANT POWER

J2 B1.SWITCHED POWER