Appleton™ APDAC/APDSC Series: Flameproof – Junction Boxes

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APDAC/APDSC Series: Flameproof – Junction Boxes

Contents

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APDAC/APDSC Series: Flameproof – Junction Boxes

Zone 1 & 2 - 21 & 22
Gas (G) and Dust (D)
IP66

Highlights

Application

- Small terminal junction boxes designed to facilitate electrical connections in hazardous areas.
- Designed for use in Zone 1 or 2 areas, where flammable gases or vapors are present either continuously or intermittently.
- Ideal for use in wet or corrosive atmospheres.
- Petroleum, chemical refineries and other industrial process facilities.
- Designed for use in Zone 21 or 22 areas, where flammable dusts are present either continuously or intermittently.
- Food processing, dairy, brewing, silos and other facilities

Features

- IK10 (20 Joules) high impact resistant box.
- Pillar/Screw type terminal block up to 16 sq.mm is available in standard sizes.
- Internal Earth: One of the mounting hole for Terminals so provided with M5 Screws
- External Earth: M5 screw.
- Back plate supplied as option.
- Operating temperature -20°C to +55°C.

Standard Materials

- Gray painted marine grade aluminum housing.
- Stainles Steel 304/316L - available on request.
- Stainless steel hardware.

Electrial Data

- Max Voltage : AC - 690 V/DC 440V
- Current Rating : 50A AC/DC

Certification Type : APDAC / APDSC

- Gas, Zones 1 and 2
- Conforming to ATEX 94/9/CE: II 2 G
- Type of Protection: Ex db IIC T* Gb
- Temperature class: T6 to T5

T Class	Max Power Dissipation
T6	10 Watts
T5	20 Watts

- Dust, Zones 21 and 22
- Conforming to ATEX 94/9/CE: II2 D
- Type of Protection: Ex tb IIIC T* Db
- Surface Temperature: T75°C to T90°C
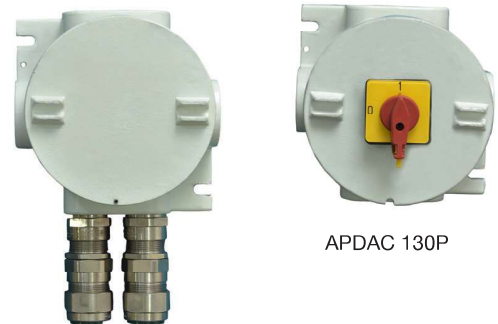- Ambient Temperature: - 20°C ≤ Ta ≤ 55°C.

T Class	Max Power Dissipation
T75°C	10 Watts
T90°C	20 Watts

ATEX Certificate: Baseefa 18ATEX0058X

IEC Ex Certificate: IECEx BAS 18.0037X

Internal Volume : ≤ 2dm³ (2 litres)
— Index of Protection according EN/IEC 60529: IP66
— Impact Resistance (shock): IK10

APDAC 130P

APDAC 130

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Catalog Coding and Guide

APDAC / APDSC - 80 mm Dia - Junction Box

APD	Material	Gas Group	Size	Entry Side	Entry Size	Terminal
APD Series	A= Aluminium S= Stainless Steel	C = IIC	08 = 080 mm	S = Straight L = 90° T = 3 way X = 4 way	1 = M20 2 = M25 3 = 1/2" 4 = 3/4"	# = Customised version **Maximum allowed terminals** 5 Nos. of 2.5 sq.mm - AKZ2.5 6 Nos. of 4 sq.mm - MK4 3 Nos. of 6 sq.mm - MK6

Equipment	Catalog Number
Threaded Entries on 3 sides	
Three way Junction Box with M20 Entry	**APDAC 080 T1 #**
Three way Junction Box with M25 Entry	**APDAC 080 T2 #**
Threaded Entries on 4 sides	
Four way Junction Box with M20 Entry	**APDAC 080 X1 #**
Four way Junction Box with M25 Entry	**APDAC 080 X2 #**
Customised Enclosures	
Non-standard Entry	**APDAC 080 #**

* Contact sales office for the configuration that are not listed here

APDAC / APDSC 80 mm Dia - Control Station

APD	Material	Gas Group	Size	Component Position	Component	Entry Side	Entry Size	Terminal
APD Series	A= Aluminium S= Stainless Steel	C = IIC	08 = 080 mm	C = Top	IR2 = Indicating Lamp-Red MR = Mushroom Head Push Button 2P = 2Position Selector *See code data for other components	A = Bottom	1 = 1 x M20 2 = 1 x M25 3 = 1 x 1/2" 4 = 1 x 3/4"	- = No Terminal # = Customised version Maximum allowed terminals 5 Nos. of 2.5 sq.mm - AKZ2.5 6 Nos. of 4 sq.mm - MK4

Equipment	Catalog Number
Control Station with Pilot Light	
Enclosure with Red Pilot Light and M20 Entry at Bottom	**APDAC 080 C IR2 A1 #**
Enclosure with Green Pilot Light and M25 Entry at Bottom	**APDAC 080 C IG2 A2 #**
Customised Enclosures	
For other combinations use the code for configuring the product	**APDAC 080 #**

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Catalog Coding and Guide

APDAC / APDSC - 130 mm Dia - Junction Box

APD	Material	Gas Group	Size	Top / Bottom Entry		Left / Right Side Entry		Terminal
				Side	Code	Side	Code	
APD Series	A= Aluminium S= Stainless Steel	C = IIC	13 = 130 mm	A = Bottom C = Top	1 = 2 x M20 2 = 2 x M25 3 = 2 x 1/2" 4 = 2 x 3/4" 5 = 1 x 1" 6 = Custom Entry	B = Left D = Right	1 = 1 x M20 2 = 1 x M25 3 = 1 x 1/2" 4 = 1 x 3/4"	# = Customised version Maximum allowed terminals 15 Nos. of 2.5 sq.mm - AKZ2.5/WDU2.5 14 Nos. of 4 sq.mm - AKZ4 / WDU4 10 Nos. of 6 sq.mm - WDU6 8 Nos. of 10 sq.mm - WDU10 4 Nos. of 16 sq.mm - WDU16

Equipment	Catalog Number
Threaded Entries at Bottom	
2 Way Enclosure with M20 entry at bottom	**APDAC 130 A1 #**
3 Way Enclosure with 2 Nos. of 3/4" entry at Bottom and one no. of 3/4" entry on Left side	**APDAC 130 A3 B3 #**
3 Way Enclosure with 2 Nos. of M25 entry at Bottom and one no. of M20 on top	**APDAC 130 A2 B1 #**
Customised Enclosures	
Entry on any side	**APDAC 130 #**

* Contact sales office for the configuration that are not listed here

APDAC / APDSC 130 mm Dia - Control Station

APD	Material	Gas Group	Size	Component Position	Component	Entry Side	Entry Size	Terminal
APD Series	A= Aluminium S= Stainless Steel	C = IIC	08 = 080 mm	C = Top	IR2 = Indicating Lamp-Red MR = Mushroom Head Push Button 2P = 2Position Selector *See code data for other components	A = Bottom	1 = 1 x M20 2 = 1 x M25 3 = 1 x 1/2" 4 = 1 x 3/4"	- = No Terminal # = Customised version Maximum allowed terminals 5 Nos. of 2.5 sq.mm - AKZ2.5 6 Nos. of 4 sq.mm - MK4

Equipment	Catalog Number
Control Station with Pilot Light	
Enclosure with Red Pilot Light and Entry at Bottom	**APDAC 130 IR2 A1 #**
Enclosure with 16A - 2 Pole Switch with 2 X M20 Entry at Bottom	**APDAC 130 P162 A1 #**
Enclosure with 32A - 3 Pole Switch with 2 X M25 Entry at Bottom	**APDAC 130 P323 A2 #**
Customised Enclosures	
Entry on any side	**APDAC 130 #**

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Push Buttons and Selector Switches

Code	Description	Code	Description
	Spring Return Push Button		**Mushroom Head Push Button**
PG	Green spring return 'I' push button with 1NO momentary contact	MR	Red mushroom head spring return with 1NC momentary contact - Padlockable in both positions
PR	Red spring return '0' push button with 1NC momentary contact	MRP	Red mushroom head push pull with 1NC maintained contact - Padlockable in both positions
	Rotary Actuator		
2P	2 maintained positions with 1NO maintained contact	MRK	Red mushroom head key release with 1NC maintained contact - Unlocked with key (MS1)
2PM	2 maintained positions key operated with 1NO maintained contact key removable in both positions (MS1)		

Pilot Lights

Code	Description		Code		Description	Code	Description	
	LED Pilot Lights							
IR0	Red	12 to 30 VAC/VDC	IR1	Red	48 to 60 VAC/VDC	IR2	Red	85 to 264 VAC
IG0	Green	12 to 30 VAC/VDC	IG1	Green	48 to 60 VAC/VDC	IG2	Green	85 to 264 VAC
IW0	White	12 to 30 VAC/VDC	IW1	White	48 to 60 VAC/VDC	IW2	White	85 to 264 VAC
IB0	Blue	12 to 30 VAC/VDC	IB1	Blue	48 to 60 VAC/VDC	IB2	Blue	85 to 264 VAC
IY0	Yellow	12 to 30 VAC/VDC	IY1	Yellow	48 to 60 VAC/VDC	IY2	Yellow	85 to 264 VAC

Power Switches

Code	Description	Code	Description	Code	Description
	16 A Switches		**25 A Switches**		**32 A Switches**
P161	1-pole switch with non-padlockable handle "0-1"	P251	1-pole switch with non-padlockable handle "0-1"	P323	3-pole switch with non-padlockable handle "0-1"
P162	2-pole switch with non-padlockable handle "0-1"	P252	2-pole switch with non-padlockable handle "0-1"	P324	4-pole switch with non-padlockable handle "0-1"
P163	3-pole switch with non-padlockable handle "0-1"	P253	3-pole switch with non-padlockable handle "0-1"		
P164	4-pole switch with non-padlockable handle "0-1"	P254	4-pole switch with non-padlockable handle "0-1"		
C22P	2 way 1-pole selector switch with non-padlockable handle "1-2"				
C33P	3 way 1-pole selector switch with non-padlockable handle "1-0-2"				

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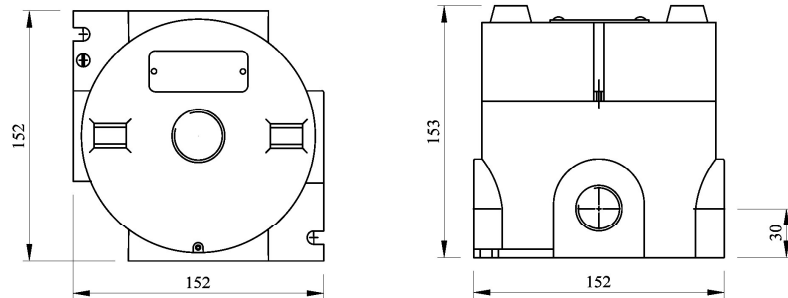# APDAC/APDSC Series: Flameproof – Junction Boxes
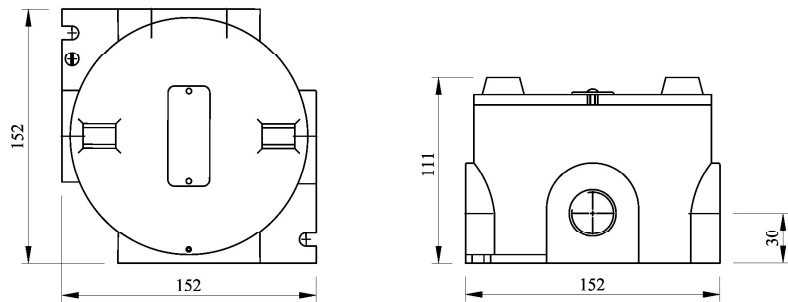
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Dimensions

Internal

Type	Internal Dimension		External Dimension			Weight (kg)	
	Dia	Height	Length	Width	Height	Alu.	SS304
APDAC130P	130 Ø	120	152	152	153	2.00	5.92
APDAC130	130 Ø	90	152	152	111	1.60	4.70
APDAC 080	80 Ø	85	102	102	111	1.10	3.21

APDAC 130P

APDAC 130

APDAC 080

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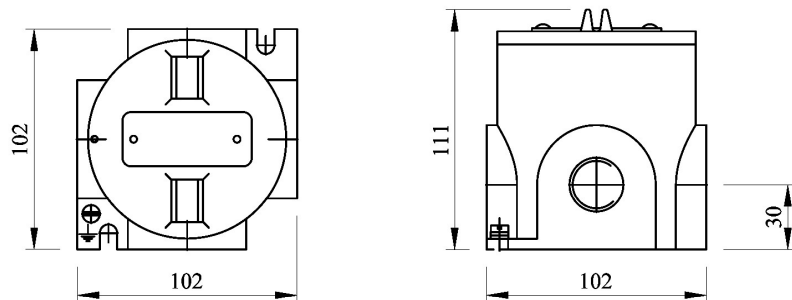
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Emerson brings integrated manufacturing solutions to diverse industries worldwide. Our comprehensive product line, extensive experience, world-class engineering and global presence enable us to implement solutions that give our customers the competitive edge. Appleton is our premium line of lighting and electrical products for hazardous and industrial locations.

For over 150 years, our electrical product brands have been providing a rich tradition of long-term, practical, high quality solutions with applications ranging from the construction and safe operation of petrochemical and process plants to providing quality power that precisely controls automotive robotic production.

Engineers, distributors, contractors, electricians and site maintenance professionals around the world trust Emerson brands to make electrical installations safer, more productive and more reliable.

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The Appleton Group business unit of Emerson is organized into three focused groups that provide distributors and end users expert knowledge and excellent service.

Electrical Construction Materials

This group is made up of the Appleton and O-Z/Gedney brands. They manufacture a broad range of electrical products including conduit and cable fittings, plugs and receptacles, enclosures and controls, conduit bodies and industrial and hazardous lighting. Whether the application is hazardous industrial or commercial, the electrical construction materials group has the products to meet your needs.

Power Quality Solutions

The SolaHD brand offers the broadest power quality line, including uninterruptible power supplies, power conditioners, voltage regulators, shielded transformers, surge protection devices and power supplies.

Heating Cable Systems

This group is made up of the EasyHeat and Nelson brands. They offer a broad range of electrical heating cable products for residential, commercial and industrial applications.

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