



HAZARDOUS AREA SOLUTIONS

atex@atexdelvalle.com | www.atexdelvalle.com

EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE



Delvalle, wide experience in manufacturing solutions for hazardous area



WE PUT AT YOUR DISPOSAL

We offer over **45 years** providing hazardous area **solutions** to demanding customers who require very specific characteristics and behaviour according to the sector and their needs.

WHEREVER YOU GO

We are committed to working closely with our customers, providing them with exceptional service and offering an advanced and **extensive range of hazardous area products** with very competitive prices.

CONSULTING & ENGINEERING

Atex Delvalle adapts to our clients' needs by offering hazardous-area systems. Certified Junction Box Assembly. Atex-delvalle are the leading certified assembler of Ex junction boxes. With an extensive stock holding of stainless steel enclosures, our workshops are able to provide unrivalled competence, expertise, quality and service to customer specifications. Our customized services, experienced design and drafting 3D support.

HIGH STANDARD OF QUALITY AND SERVICES

We only use materials provided by companies who offer the very highest quality, suitable and certified products. Our success is due to **top quality** assurance: ISO 9001, SGS, UL, TÜV, ISO 14000, Ohsas 18001, ATEX, IECEx.



CONTACT US

Confidentiality, reliability & quality

www.atexdelvalle.com
atex@atexdelvalle.com
+34 945 601 381

ALSO ONLINE

Please contact our technical sales department.

A team of professionals with high experience and ability to solve all your queries.



**Zones 1 and 2**

EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE



Examples



It is Suitable for Rated Operational Currents of 6A, 10A, 16A, 20A, 25A, 32A and 40A

Delvalle residual current circuit breaker is a component for residual current monitoring and switches systems in the event of residual currents, for reliable protection of persons in hazardous areas.

It is suitable for rated operational currents of 6A, 10A, 16A, 20A, 25A, 32A and 40A, and rated residual currents of 10, 30, 100 and 300 mA.

➔ [FOR MORE INFORMATION CLICK HERE](#)



EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE

TECHNICAL DATA

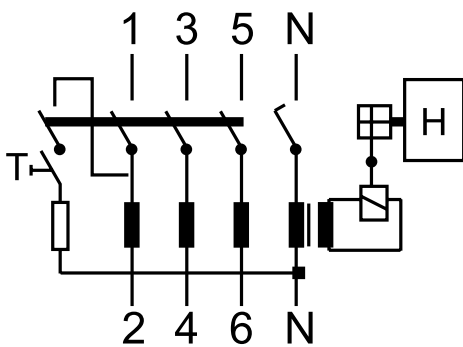
- Zones 1 and 2.
- Rated voltage: 230V / 400V, 50Hz.
- Rated current: Max. 40A.
- Rated remained action current: 10, 30, 300 mA.
- Trip character: C characteristic curve.
- Number of poles: 1P+N and 4P.
- Terminals:
 - Main contacts 1 ~ 10mm² (6 ~ 10mm² used in connection with compression lug).
- Material of enclosure: unsaturated resin.
- Weight: 1,10kg (1P+N) and 1,90kg (4P).



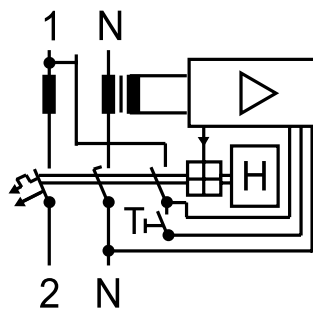
CERTIFICATES

- Certificates number:
 - CML I9ATEX1299U
 - IECEx CML 19.0084U
- Type protection:
 - II2G Ex db eb IIC Gb
- Standard:
 - Directive 2014/34/EU
 - EN IEC 60079-0:2018
 - EN 60079-1:2014
 - EN IEC 60079-7:2015+A1:2018
 - IEC 60079-0:2017
 - IEC 60079-1:2014-06
 - IEC 60079-7:2017
- Ambient temperature:
 - -20°C <T_a<+60°C (IIC)
 - -40°C <T_a<+60°C (IIB)
- Operating temperature:
 - -20°C <T_a<+110°C (IIC)
 - -40°C <T_a<+110°C (IIB)

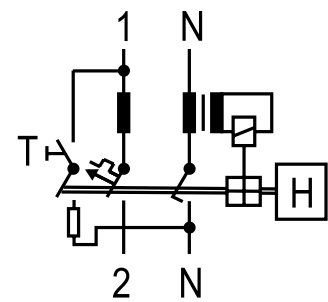
ELECTRICAL DIAGRAM



Electromagnetic
(Reference DFL)



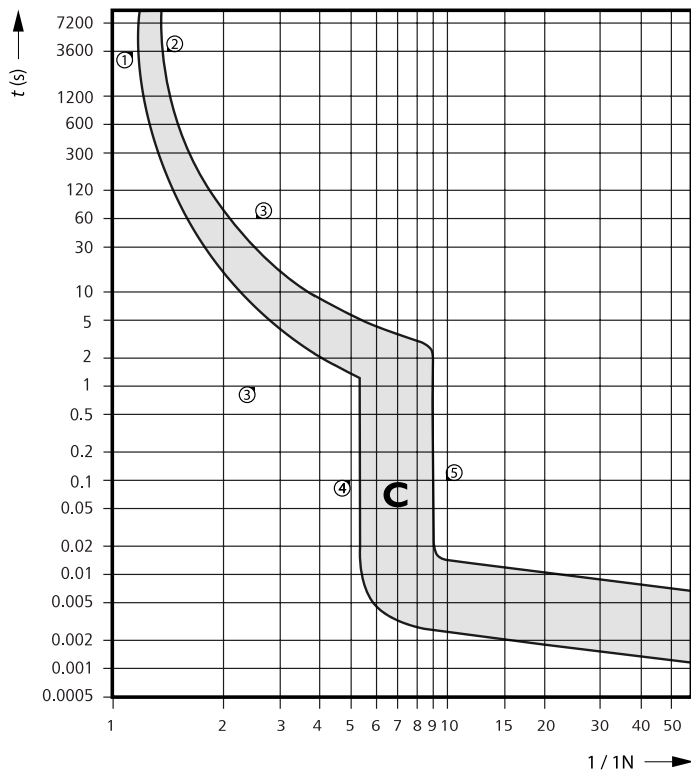
Electronic
(Reference DFD)



Electromagnetic
(Reference DFL)

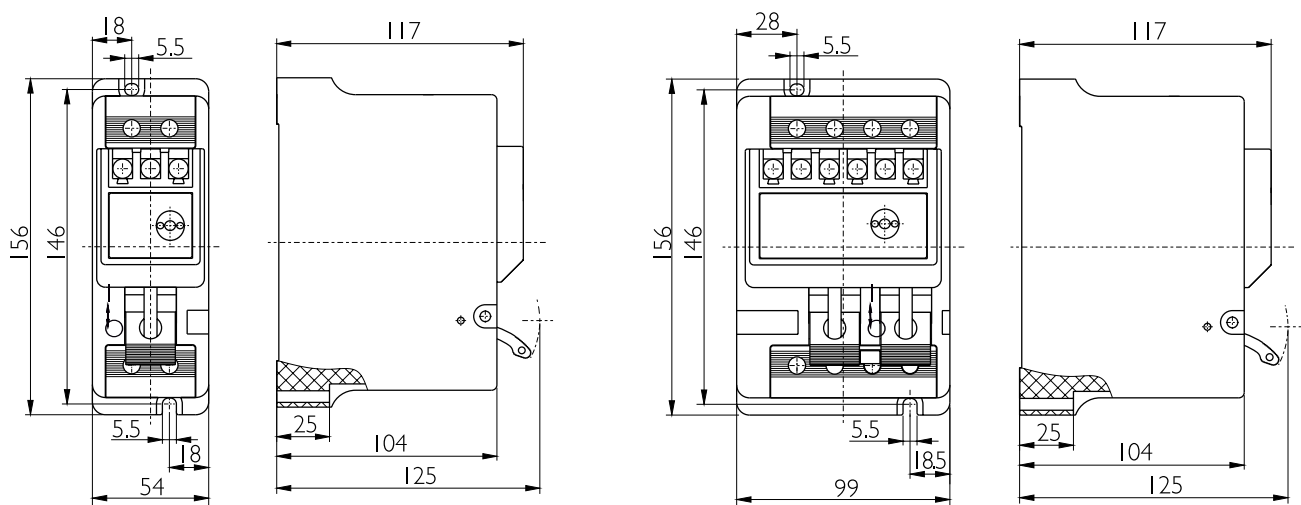
EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE

TRIP CURVE (Ambient Temperature: 30°C)



TRIP CHARACTERISTIC	
①	Defined non-tripping current $I_{nt} = 1.13 I_N; t > 1h$
②	Defined tripping current $I_t = 1.45 I_N; t < 1h$
③	$2.55 I_N; t = 1-60 s (I_N \leq 32A)$ $t = 1-120 s (I_N > 32A)$
④	Type C $5 I_N; t > 0.1s$
⑤	$10 I_N; t < 0.1s$

PLAN AND DIMENSIONS



SIZE 1
(IP+N)

SIZE 2
(4P)
(IP+N+ Auxiliary contact)

EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE

REFERENCES ELECTROMAGNETIC (DF)

REFERECES EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC (DF)	
REFERENCE	DESCRIPTION
DF25A/3N/30	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 25A 3P+N 30mA
DF25A/3N/100	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 25A 3P+N 100mA
DF25A/3N/300	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 25A 3P+N 300mA
DF40A/3N/30	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 40A 3P+N 30mA
DF40A/3N/100	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 40A 3P+N 100mA
DF40A/3N/300	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 40A 3P+N 300mA

REFERENCES ELECTRONIC (DFD) AND ELECTROMAGNETIC (DFL)

Reference configuration. Examples: DFD20/IP+N/10, DFL20/IP+N/300, **DFD32/IP+N/30** or **DFD32/IP+N/30**.

1	+	2	+	3	+	4
Code		Rated Current		Number of Poles		Rated Creep Age Current
		6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A				10: 10mA 30: 30mA 300: 300mA
DFD (Electronic) DFL (Electromagnetic)		32	/	IP+N	/	30

REFERECES EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC (DFD)	
REFERENCE	DESCRIPTION
DFD6A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC TYPE 6A IN _mA CURVE C 6kA
DFD10A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC TYPE 10A IN _mA CURVE C 6kA
DFD16A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC TYPE 16A IN _mA CURVE C 6kA
DFD20A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC TYPE 20A IN _mA CURVE C 6kA
DFD25A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC TYPE 25A IN _mA CURVE C 6kA
DFD32A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC TYPE 32A IN _mA CURVE C 6kA
DFD40A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTRONIC TYPE 40A IN _mA CURVE C 6kA

Replace "_" of the reference with "10", "30" or "300", to choose rated creep age current

REFERECES EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC (DFL)	
REFERENCE	DESCRIPTION
DFL6A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 6A IN _mA CURVE C 6kA
DFL10A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 10A IN _mA CURVE C 6kA
DFL16A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 16A IN _mA CURVE C 6kA
DFL20A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 20A IN _mA CURVE C 6kA
DFL25A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 25A IN _mA CURVE C 6kA
DFL32A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 32A IN _mA CURVE C 6kA
DFL40A/IP+N/_	EX RESIDUAL CURRENT CIRCUIT BREAKER MODULE - ELECTROMAGNETIC TYPE 40A IN _mA CURVE C 6kA

Replace "_" of the reference with "10", "30" or "300", to choose rated creep age current

DELVALLE OFFERS OTHER SOLUTIONS ATEX & IECEx

➔ [CLICK HERE AND DISCOVER ALL SOLUTIONS](#)

ATEX TERMINAL BOXES TERBOX SERIES



EX LOCAL CONTROL & DISTRIBUTION BOXES CONTREX SERIES



PLUG AND SOCKET BOXES CONNEX SERIES



FLAMEPROOF CONNECTION BOXES EJB SERIES



EX LIGHTING FIXTURE ATEX



PRESSURIZED ENCLOSURE EX P PEPPEX SERIES



DELVALLE OFFERS OTHER SOLUTIONS ATEX & IECEx

➔ [CLICK HERE AND DISCOVER ALL SOLUTIONS](#)

EX CABLE GLANDS ATEX & IECEx



MOTOR AND SWITCH MACHINES ATEX & IECEx



EX PUSH BUTTON STATION CONTREX SERIES



INDUSTRIAL WORKSTATIONS & HMI'S ATEX



EX 19" RACK ATEX



HAZARDOUS WIRELESS & ANTENNA SYSTEMS ATEX





/ FLEXIBLE ATEX & IECEX SOLUTIONS



Paso del Prao, 6. 01320 Oyón (Álava), Spain
Telf. +34 945 601 381
www.atexdelvalle.com - atex@atexdelvalle.com

Contact us, we will be available at any time