Description

Single pole, thermal circuit breaker with trip-free mechanism, push/pull on/off manual actuation (M-type TO CBE to EN 60934) and temperature compensation. An indicator band on the push button clearly shows the tripped/off position. The robust design makes type 4140 suitable for extremely harsh conditions.
Various dummies are available without protective function, allowing connection of pre-installed wiring without loads.

Typical applications

Land vehicles, aircraft, watercraft, special vehicles.

Ordering information

Type No.

4140 High performance thermal circuit breaker with temperature compensationn

Mounting

G threadneck panel mounting

Threadneck design

1 M12x0.75x7 alu, blackened, 1 location pin

Number of poles

1 1-pole, protected

Hardware for threadneck

3 hex nut M12x0.75, alu, serrated lock-washer 12.1/17.2, supplied separately

Terminal design (main terminals)

J1 screw terminals with inch thread (8-32UNC-2B)

Characteristic curve

M1 thermal 1.1-1.45 x I_N

Accessories Terminal screws & Terminal washers

M6 hex screw with Phillips head 8-32UNC-3Ax7.6 & lock washer 4.3/9 supplied separately

Z0 without accessories

Auxiliary contact, Barrier, Colour of the push button

S0TN without auxiliary contact, with barrier, black

S5TG with polarized aux. contact (female contact for male contacts to EN3155-016M2018), with barrier, green

Current ratings

20...50 A

4140 - G 1 1 3 - J1 M1 -M6 S5TG - 20 A ordering example

4140

without auxiliary contact | with auxiliary contact

Technical data

Voltage rating	AC 115 V (300 Hz to 800 Hz); DC 28 V	
Current rating range	20...50 A	
Auxiliary circuit	0.5 A, DC 28 V	
Typical life	5,000 operations mechanical and 2,500 operations at I_N	
Ambient temperature	-55...+125 °C (-67...+257 °F)	
Temperature compensation	-55...+90 °C (-67...+194 °F)	
Insulation co-ordination (IEC 60664)	rated impulse withstand voltage 1.5 kV	pollution degree 3
Dielectric strength operating area main to aux. circuit	test voltage AC 1,500 V AC 1,500 V	
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity I_{cn}	AC 115 V (400 Hz): 1,500 A DC 28 V: 4,000 A	
Degree of protection (IEC 60529)	operating area IP40 terminal area IP00	
Vibration (sinusoidal)	± 0.76 mm (5-80 Hz) 10 g (80-500 Hz), 5 g (500-2000 Hz) to EN 2350 para 5.3.1 and ISO 7137	
Vibration (random)	0.04 g^2/Hz (40-500 Hz) 5.8 g rms (10-2000 Hz) to ISO 7137	
Acceleration	17 g, to EN 2350, para 5.3.3 and ISO 2669	
Shock	50 g (11 ms), to EN 2350 para 5.3.2 and ISO 7137	
Corrosion	48 hours at 5 % salt mist to EN 2350 para 5.4.2 and ISO 7137	
Humidity	240 hours at 95 % RH, to EN 2350 para 5.4.3 and ISO 7137	
Altitude	≤ 15,000 m above sea level	
Mass	approx. 57 g approx. 60 g	with accessories and without auxiliary contact with accessories and with auxiliary contact

Standard current ratings and typical volt drop values

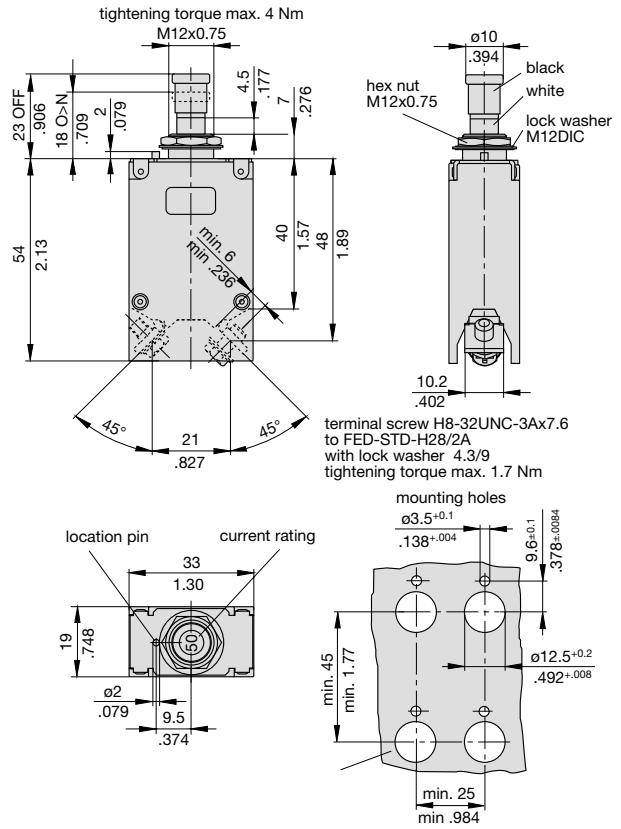
Current rating (A)	Volt drop per pole (mV)
20	150
25	150
30	150
35	150
40	120
45	120
50	120

Approvals

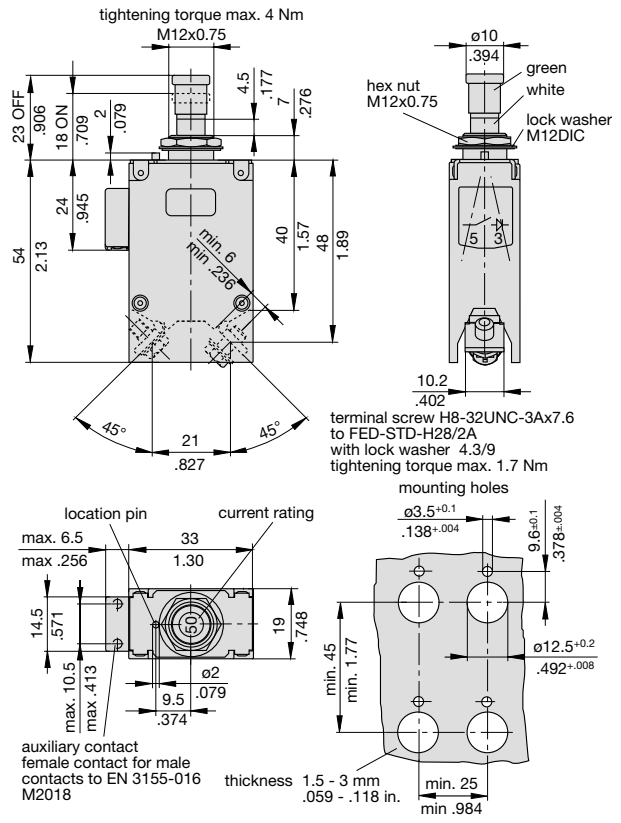
Authority	Standard	Voltage ratings	Current ratings
Airbus	EN 3661-005	AC 115 V, 400 Hz DC 28 V	20…50 A 20…50 A

Dimensions

4140-G113-J1M1-Z0S0TN-.. (NSA 931321, prEN 2794-004)
4140-G113-J1M1-M6S0TN-.. (NSA 931321, prEN 2794-004)

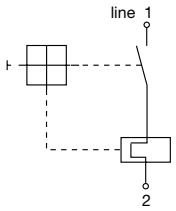


4140-G113-J1M1-Z0S5TG-.. (ASNE 0732-005, EN 3661-005)
4140-G113-J1M1-M6S5TG-.. (ASNE 0732-005, EN 3661-005)

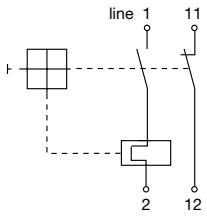


This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

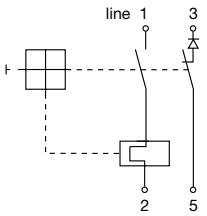
Internal connection diagrams



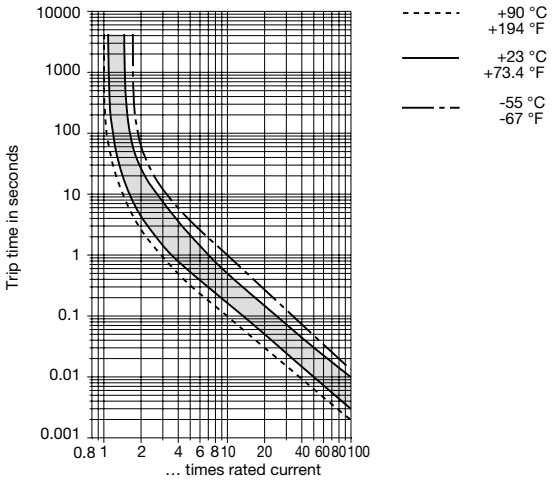
with auxiliary contact



with polarized auxiliary contact



Typical time/current characteristics



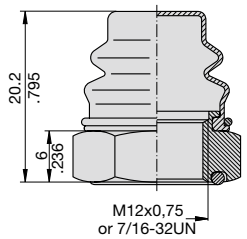
Accessories

Splash cover/hex nut assembly with O ring (IP66 and IP67)
X 200 801 15 black anodised nut M12x0.75x6, black cover

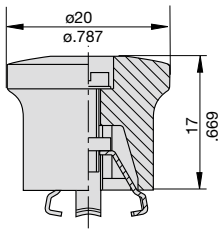
Splash cover/hex nut assembly with O ring (IP66 and IP67)
X 200 801 16 black anodised nut 7/16-32UNx6, black cover

Splash cover/hex nut assembly with O ring (IP66 and IP67)
X 200 801 17 black anodised nut 7/16-32UNx6, transparent cover

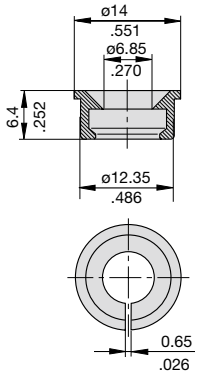
Splash cover/hex nut assembly with O ring (IP66 and IP67)
X 200 801 18 black anodised nut M12x0.75x6, transparent cover



Actuator extension (black) to be fitted on the push button
X 200 803 01 (approved to VG 95345, part 23)



Identification collar to be snapped on the push button
Y 307 004 01 black
Y 307 004 02 white
Y 307 004 03 red
Y 307 004 04 green
Y 307 004 05 blue



This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.Product markings may not be exactly as the ordering codes. Errors and omissions excepted.

5

LifeElectronics
Живое партнерство

ООО «ЛайфЭлектроникс» **“LifeElectronics” LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

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