

The information furnished is believed to be accurate and reliable. However, E-T-A assumes no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 1 of 37

Replacing data sheet dated 382.073.468 24. Oct. 1997

Technical data

to EN 60 934

Max.voltage rating
Rated insulation voltage
Current rating range

AC 240V / DC 50 V, AC 415V
AC 415 V
0.1 20A 1 and 2 pole

Current ratings

0.1; 0.2; 0.3; 0.4; 0.5; 0.6; 0.8; 1.0; 1.2;
1.5; 2.0; 2.5; 3.0; 3.5; 4.0; 4.5; 5.0; 6.0;
7.0; 8.0; 10.0; 12.0; 14.0; 15.0; 16.0; 18.0; 20A

Reference ambient temperature

-30°C ... +60°C (T60)

Effect of the ambient temperature on the tripping characteristics

Temperature (°C)	-30	-20	-10	-5	+10
Factor	0.80	0.84	0.88	0.90	0.94
Temperature (°C)	+23	+30	+40	+50	+60
Factor	1.0	1.03	1.08	1.14	1.23

Creepage resistance
Method of operation
Mode of tripping

PTI 400
S-type
TO / positively trip free

Typical electrical operational values

Voltage drop in V at 1 I_N

I _N (A)	0.1	0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.5
V	9.4	4.8	3.6	2.2	2.2	1.8	1.8	0.9	1.0	0.7
I _N (A)	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0
V	0.6	0.2	0.18	0.2	0.17	0.2	0.16	0.13	0.12	0.13
I _N (A)	9.0	10.0	12.0	14.0	15.0	16.0	18.0	20.0		
V	0.1	0.13	0.11	0.11	0.12	0.12	0.12	0.11		

Insulation coordination (IEC 664 and 664A)

Rated impulse withstand voltage / Pollution degree
max EN 60 934
4kV / 3 2.5KV / 2

Dielectric strength (IEC 664 and 664A)
operating area (reinforced insulation, sheet 23)
mounting area (sheet 23)
pole / pole (2-pole)

test voltage, AC
max. EN 60 934
4000 V 3000 V
2000 V 1500 V
2000 V 1500 V

Insulation resistance
Minimum load (main circuit)

> 100 MΩ (DC 500 V)
DC 10 V / 100 mA

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Sheet	Date	Name	Index	AM	Sheet	Date	Name
g	17 866	1-37	26.06.00	K.Go					
h	18 056	32	13.12.00	K.Go					
i	18 338	22	23.07.01	K.Go					

The information furnished is believed to be accurate and reliable. However, E-T-A assumes no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 2 of 37

Operating cycles

Behaviour at rated current (EN 60 934, test sequence C)

		mechanical	electrical, 1 I _N	
1 pole	50 000		0.1 - 16A, AC 240, cosφ 0.95	30,000
			> 16A, AC 240, cosφ 0.95	10,000
			0.1 - 10A, DC, L/R= 0 ms	30,000
			12 - 16A, DC 28V, L/R = 0 ms	30,000
2 pole	50 000		> 16A, DC 28V, L/R = 0 ms	10,000
			0.1 - 16A, AC 240, cosφ 0.95	50,000
			0.1 - 16A, DC, L/R= 0 ms	50,000
2 pole	10 000		> 16A, AC 240, cosφ 0.95	10,000
			> 16A, DC, L/R = 0 ms	10,000
			0.1 - 16A, AC 415, cosφ 0.95	10,000

Behavior at rated switching capacity (40 cycles)
(EN 60 934, test sequence D)

AC; 6 I _N power factor 0.6	DC; 4 I _N time constant 2.5 ms
0.1 ... 20A, 1 pole / AC 240	0.1 ... 10A, 1 pole DC 50V
0.1 ... 20A, 2 pole / AC 240	0.1 ... 20A, 2 pole DC 50V
0,1 ... 16A, 2 pole / AC 415	0.1 ... 20A, 1 pole DC 28V

Rated short-circuit capacity I_{cn}
(EN 60 934, test sequence E)

	I _N	U _N	I _{cn}
1 and 2 pole	0.1 ... 2A	AC 240 V	10 x I _N
1 pole	2.5 ... 20 A	AC 240 V	200 A
2 pole	2.5 ... 20 A	AC 240 V	300 A
1 and 2 pole	0.1 ... 2A	DC 50V	10 x I _N
1 pole	2.5 ... 10A	DC 50V	50 A
2 pole	2.5 ... 20A	DC 50 V	250 A
1 pole	2.5 ... 20 A	DC 28 V	200 A
2 pole	2.5 ... 20 A	DC 28 V	300 A

Rated conditional short-circuit current I_{nc}
(EN 60 934, PC 1 / UL 1077, § 21)

	I _N	U _N	I _{nc}
1 and 2 pole	0.1 ... 16 A	AC 240 V	3500A
2 pole	18 ... 20 A	AC 125 V	3500A
1 and 2 pole	0.1 ... 20 A	DC 50 V	200A

The current rating of the back-up fuse to IEC 269 (DIN VDE 0636) shall be four times the current rating of the curcuit breaker, but at least 15A.

Typical mechanical values

Operating force

	rocker	push button
ON	15 N	18 N
OFF	5 N	6 N
Operating force with X3120-U		
ON	23 N	29 N
OFF	8 N	9 N

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	ÄM	Date	Name	Index	ÄM	Date	Name
g	17 866	26.06.00	K.Go				

The information furnished is believed to be accurate and reliable. However, E-T-A assumes no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 3 of 37

Mounting values	200 N max. insertion				
Blade terminals P70	80 N max. insertion 80 N max. withdrawal				
Terminal screws	0.55 N max. tightening torque				
Mass	approx. 27 g 1 pole approx. 31 g 2 pole				
Environmental tests (typical values)					
Vibration (sinusoidal) to DIN IEC 68-2-6, test Fc, 10 frequency cycles / axis	± 0.61 mm (10 - 57 Hz), 8g (57 - 500 Hz)				
Shock to DIN IEC 68-2-27, test Ea	30 g (11ms)				
Corrosion to DIN IEC 68-2-11, test Ka	96 hours at 5% salt mist				
Humidity to DIN IEC 68-2-3, test Ca	240 hours at 95% RH, 40°C				
Degree of protection (IEC 529 / DIN 40 050) operating area terminal area	IP 40 (IP 54 with splash cover) IP 00				
Temperature limits	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">on duty</td> <td style="text-align: center;">storage</td> </tr> <tr> <td style="text-align: center;">- 30° C ...+ 60° C</td> <td style="text-align: center;">- 40° C ...+ 80° C</td> </tr> </table>	on duty	storage	- 30° C ...+ 60° C	- 40° C ...+ 80° C
on duty	storage				
- 30° C ...+ 60° C	- 40° C ...+ 80° C				
Approval logos	see marking instructions				
Note:					
Time / current characteristic curve	see sheets 4 / 5				
Dimensions	see sheet 6				
Rocker / button variants	see sheets 7 / 8				
Flange dimensions	see sheets 9 - 26				
Connection variants and internal connection diagram	see sheet 27				
Installation	see sheet 28				
Order numbering code	see sheets 29 - 37				

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	ÄM	Date	Name	Index	ÄM	Date	Name
g	17 866	26.06.00	K.Go				

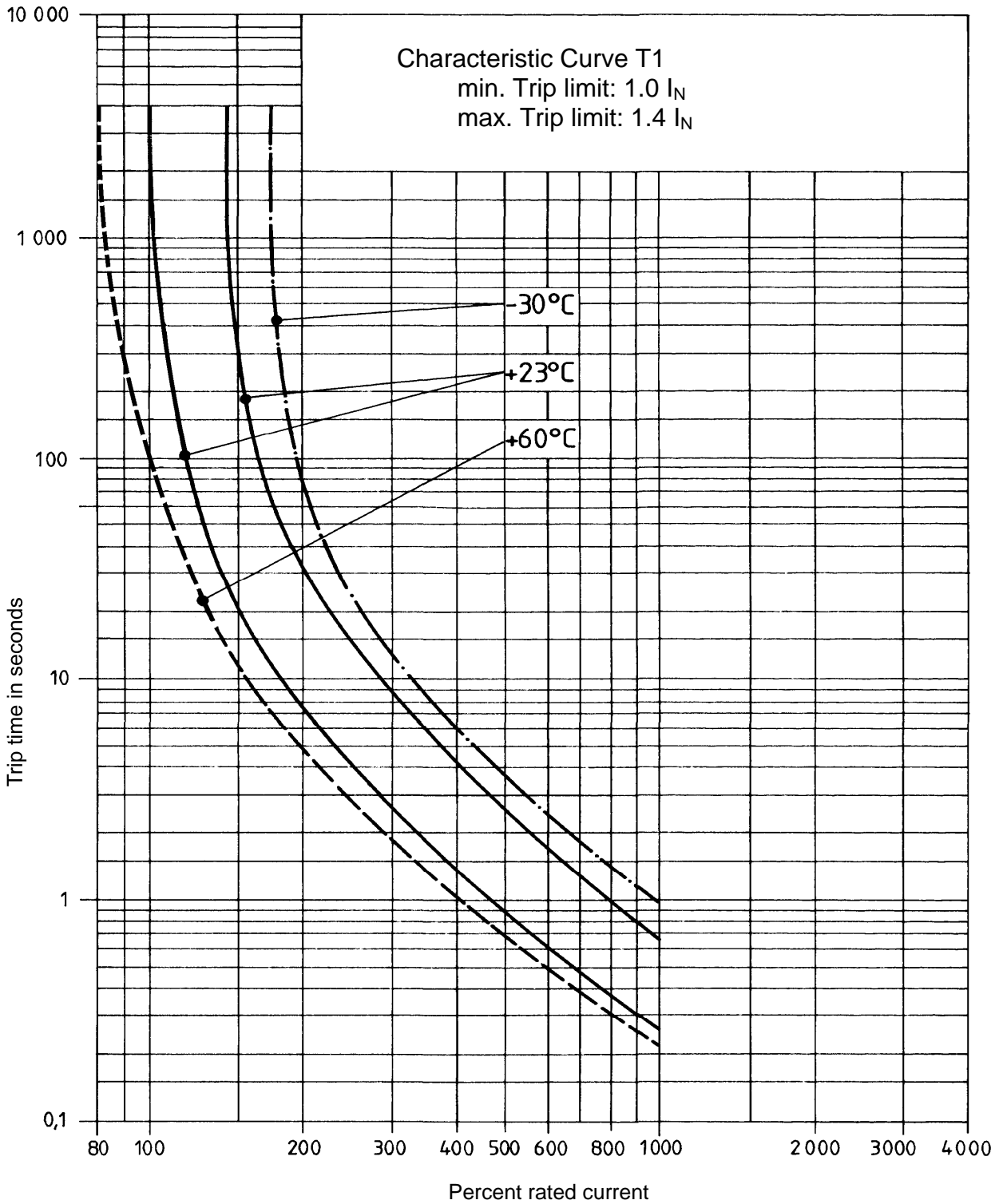
The information furnished is believed to be accurate and reliable. However, no responsibility is assumed for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 4 of 37

Type of current: AC / DC
Current rating range: 0.1 - 2A



The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

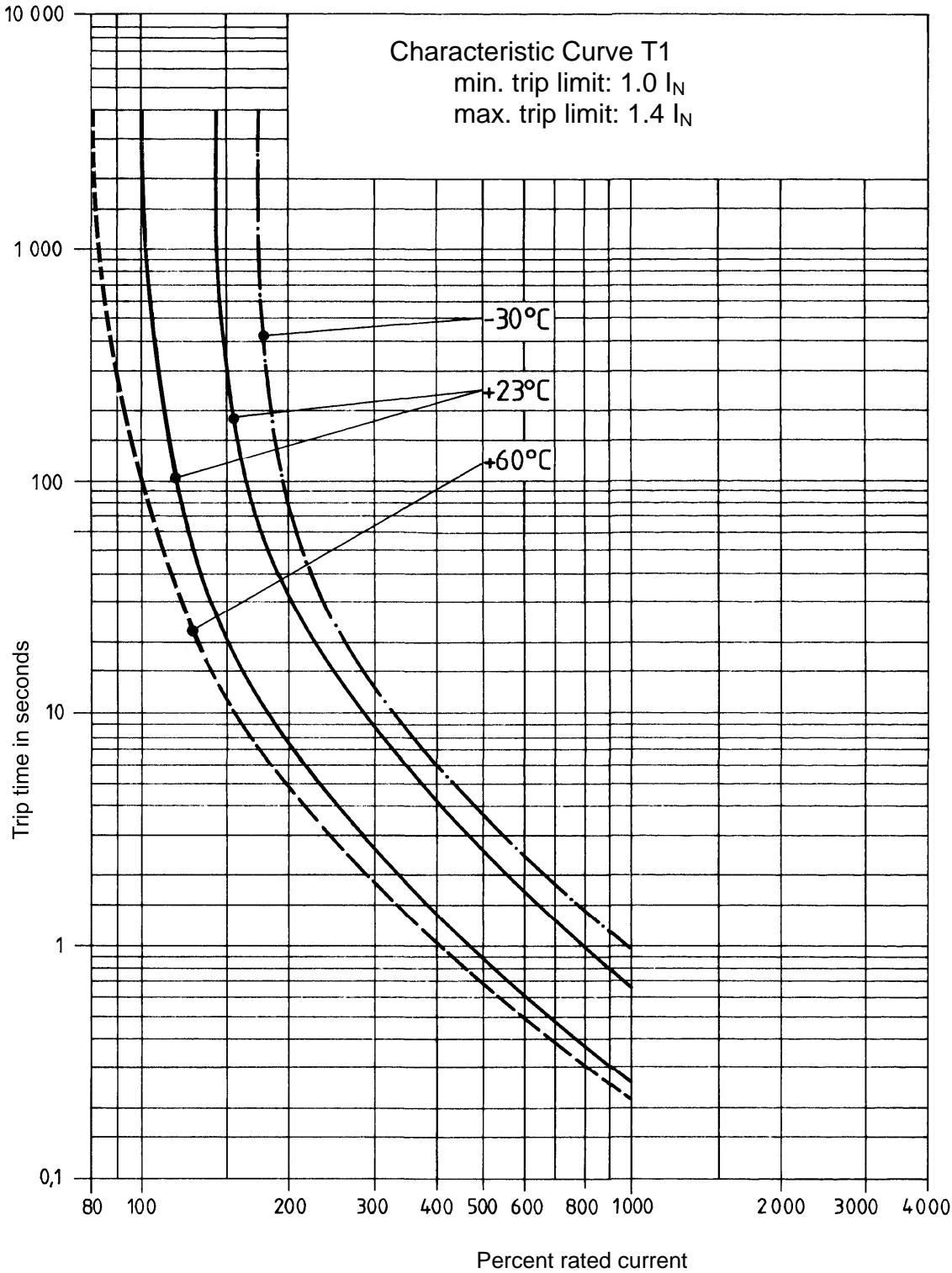
The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 5 of 37

Type of current: AC / DC
Current rating range: 2.5 - 20A



Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

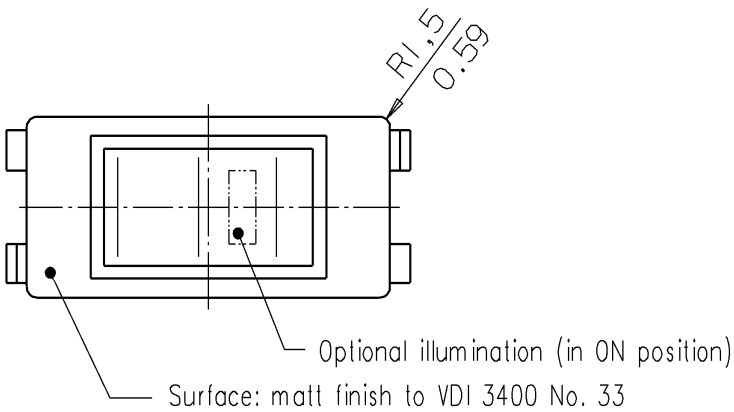
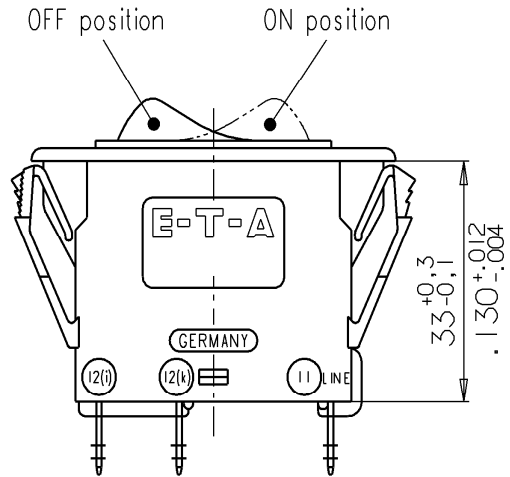
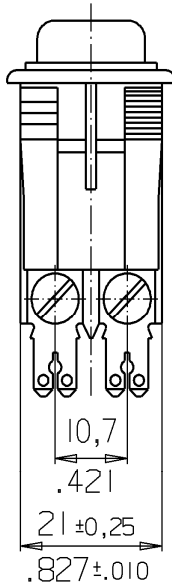
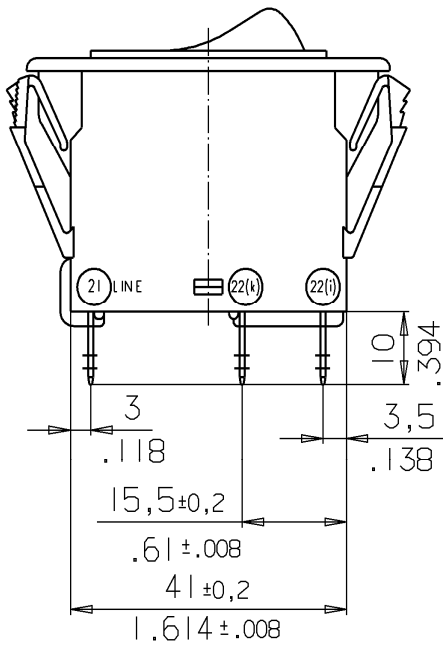
The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 6 of 37

3120-F



Nominal dimensions without direct tolerance indication: ±IT13

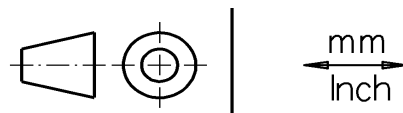
For dimensions of other flange versions see sheets 7-22

This is a metric design and millimeter dimensions take precedence

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

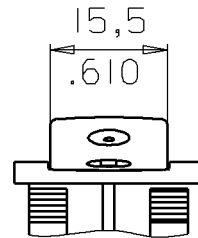
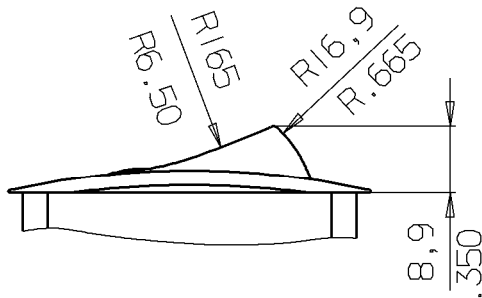
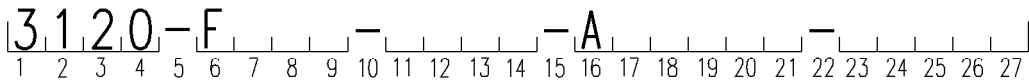
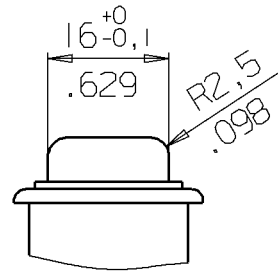
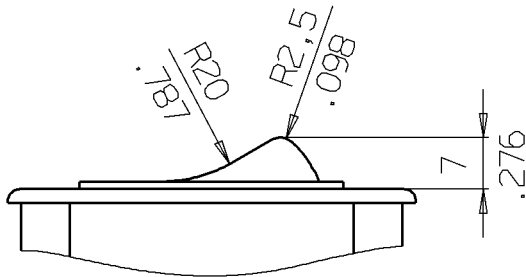
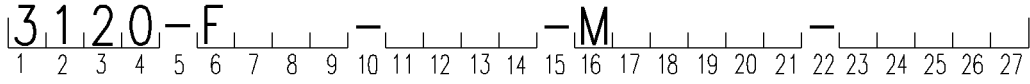
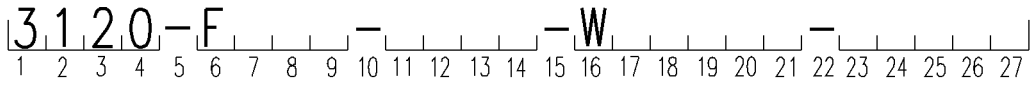


The information furnished is believed to be accurate and reliable. However, E-T-A no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 7 of 37

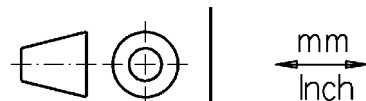


1:1

This is a metric design and millimeter dimensions take precedence

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



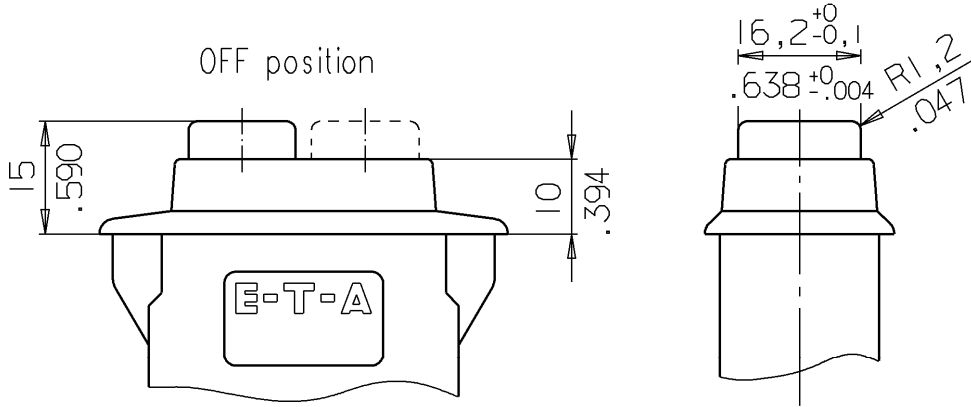
The information furnished is believed to be accurate and reliable. However, E-T-A assumes no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



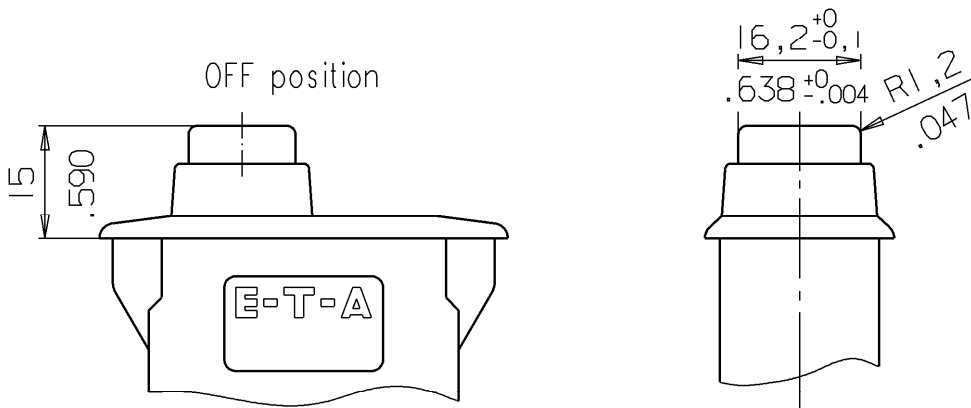
Overcurrent Circuit Breaker
thermal trip
3120-...-...T1-...
one and two pole

Data Sheet
382.073.468
sheet 8 of 37

3 1 2 0 - F - - - - - S - - - - -



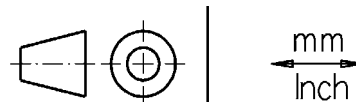
3 1 2 0 - F - - - - - D - - - - -



1 : 1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



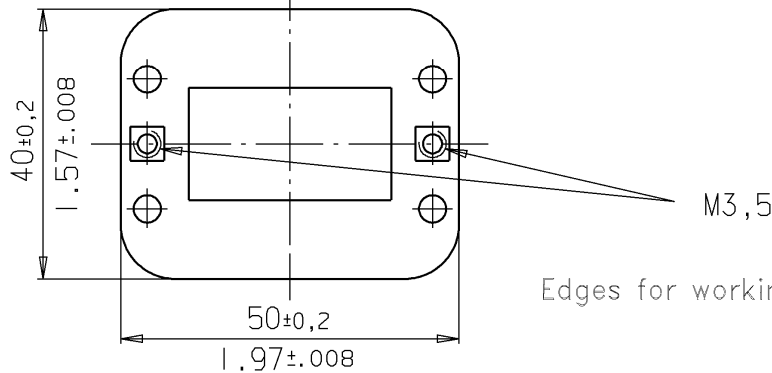
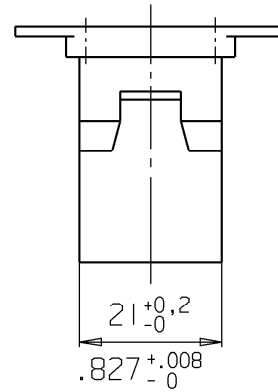
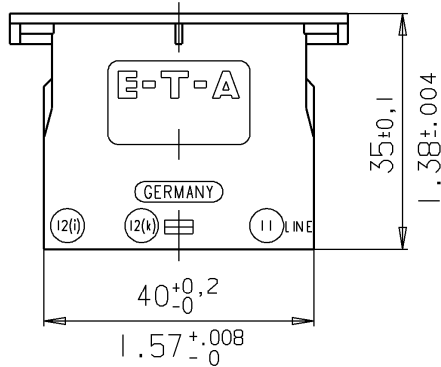
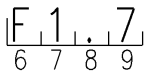
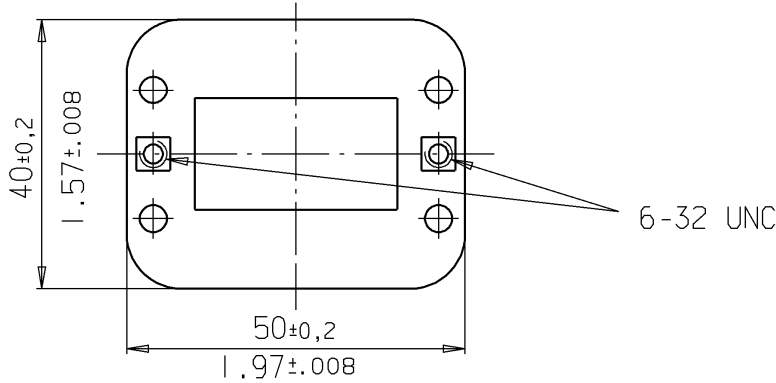
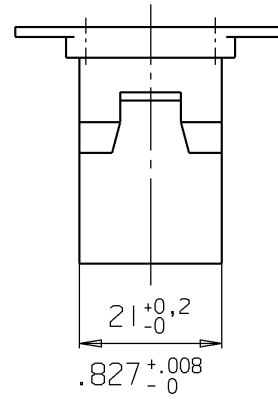
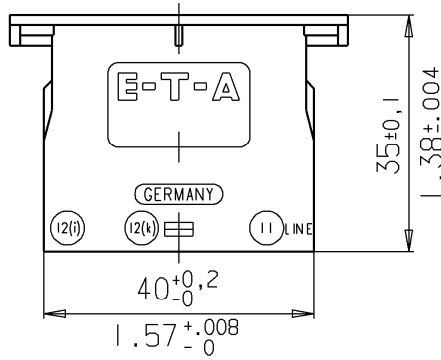
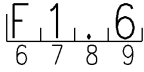
The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

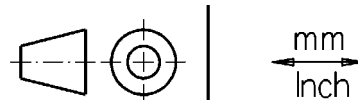
Data Sheet
382.073.468
sheet 9 of 37



This is a metric design and millimeter dimensions take precedence
Nominal dimensions without direct tolerance indication: ± IT 13

1:1

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

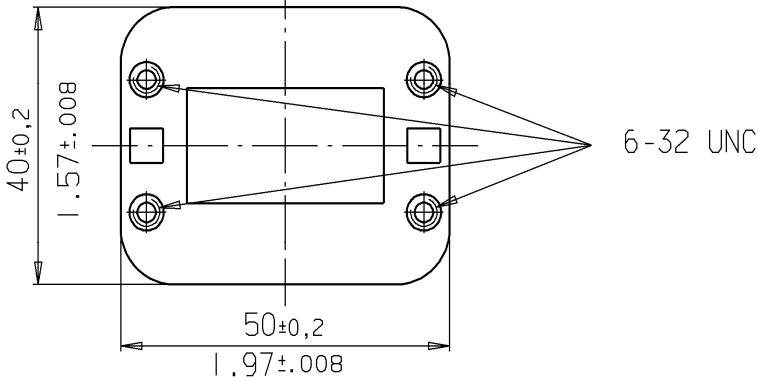
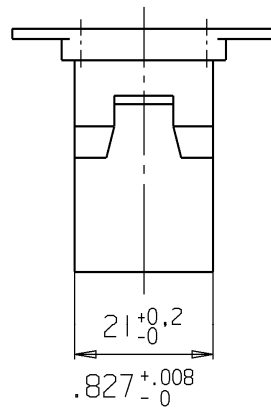
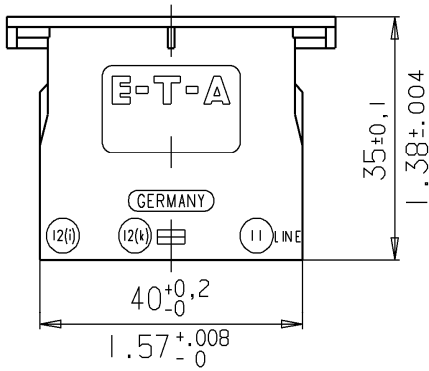
The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.



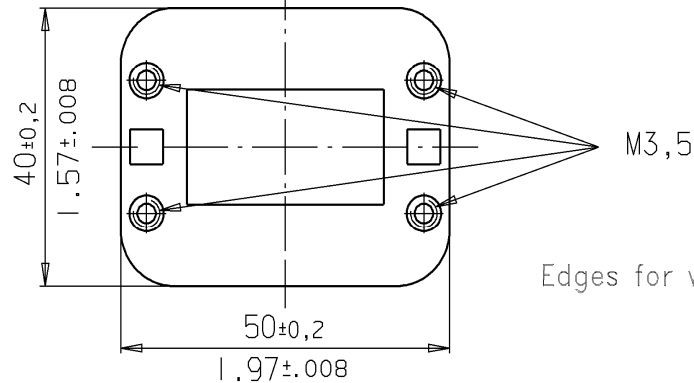
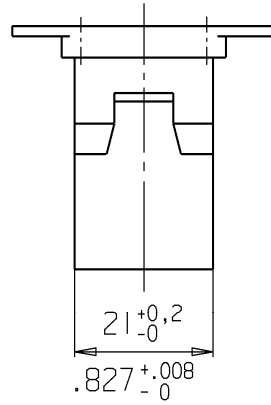
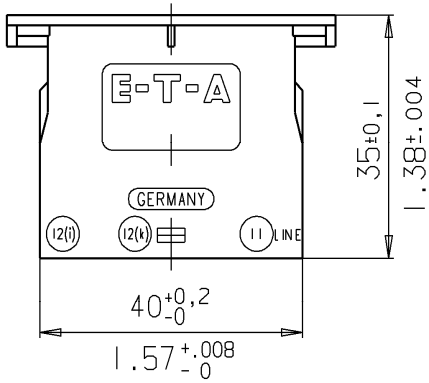
Overcurrent Circuit Breaker
thermal trip
3120-...-...T1-..
one and two pole

Data Sheet
382.073.468
sheet 10 of 37

F 1 1 8 9



F 1 1 9

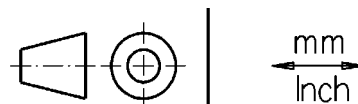


Edges for working parts: DIN 6784

This is a metric design and millimeter dimensions take precedence
Nominal dimensions without direct tolerance indication: ± IT 13

1:1

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

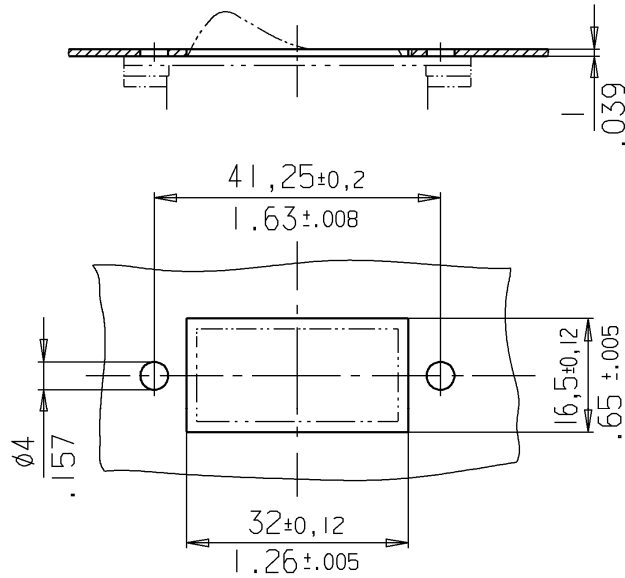


Overcurrent Circuit Breaker
thermal trip
3120-...-...T1-..
one and two pole

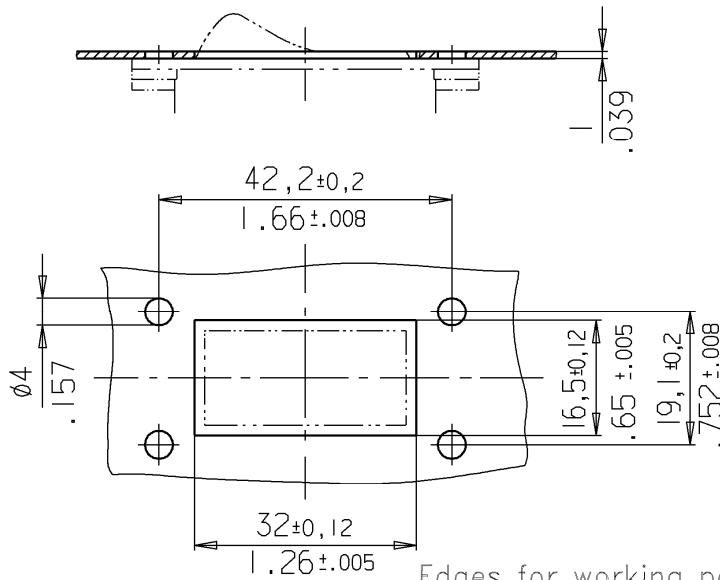
Data Sheet
382.073.468
sheet 11 of 37

This is a metric design and millimeter dimensions take precedence

Panel cut-out F1.6 / F1.7



Panel cut-out F1.8 / F1.9

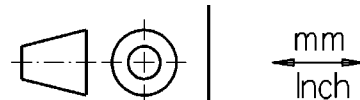


Edges for working parts: DIN 6784

Nominal dimensions without direct tolerance indication: ± IT 13

1:1

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.



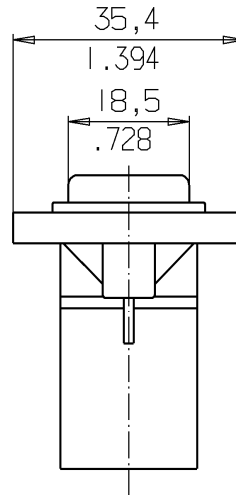
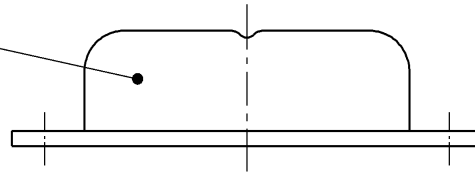
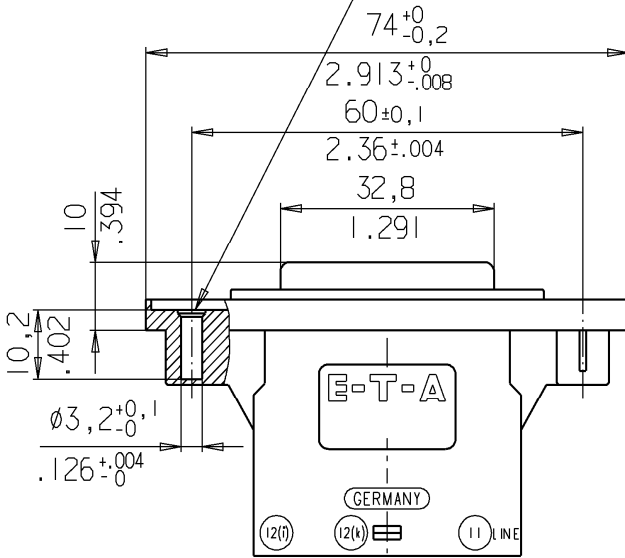
Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 12 of 37

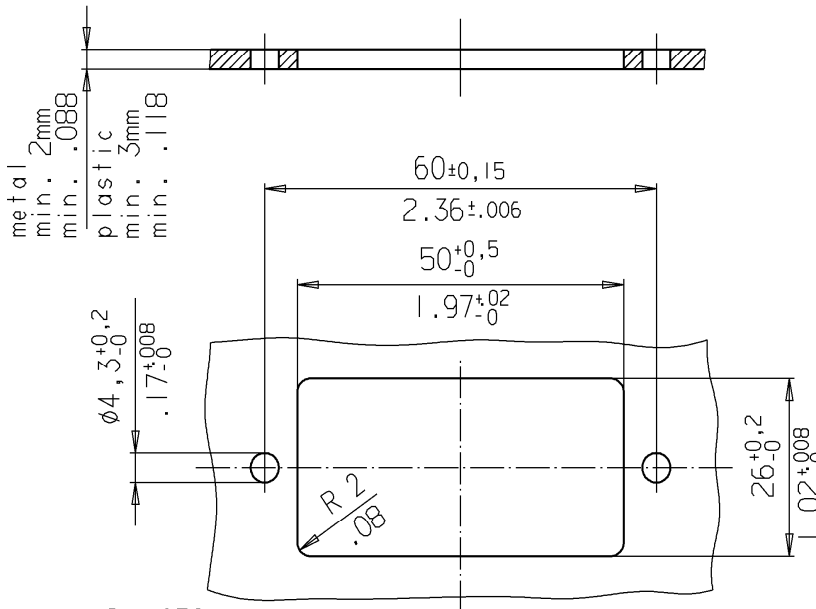
E 2 1 1 E
6 7 8 9

water splashcover
Y30600101

hole for PT-screw K40



Panel cut-out



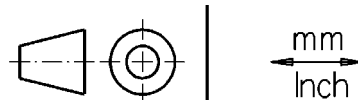
Edges of working parts: DIN 6784

Nominal dimensions without direct tolerance indication: ± IT 13

1:1

This is a metric design and millimeter dimensions take precedence

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



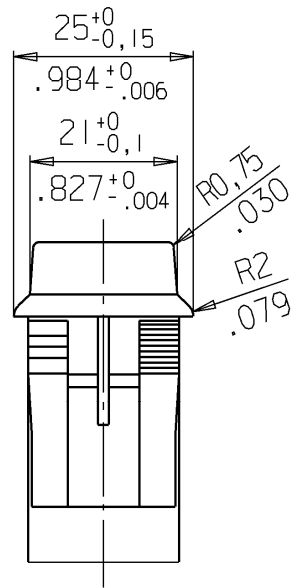
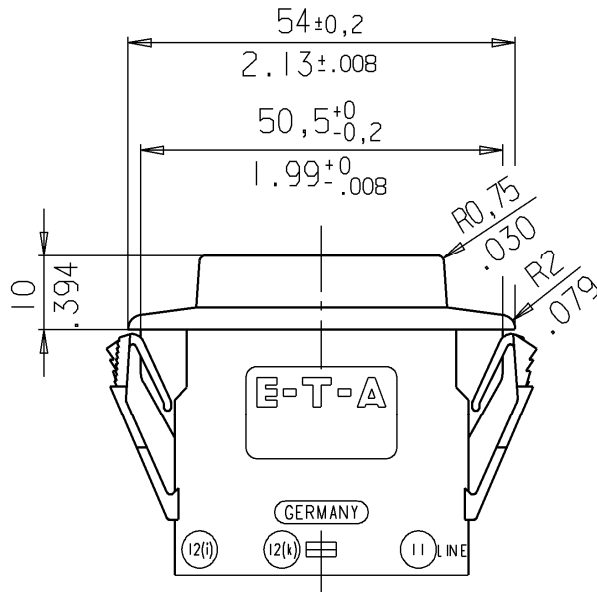
The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



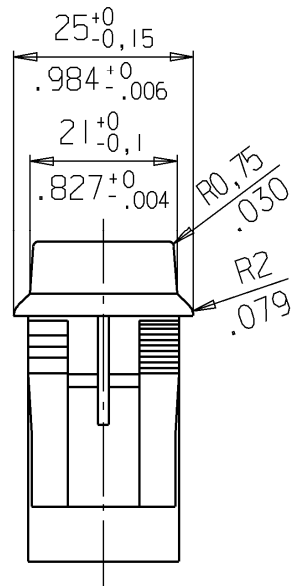
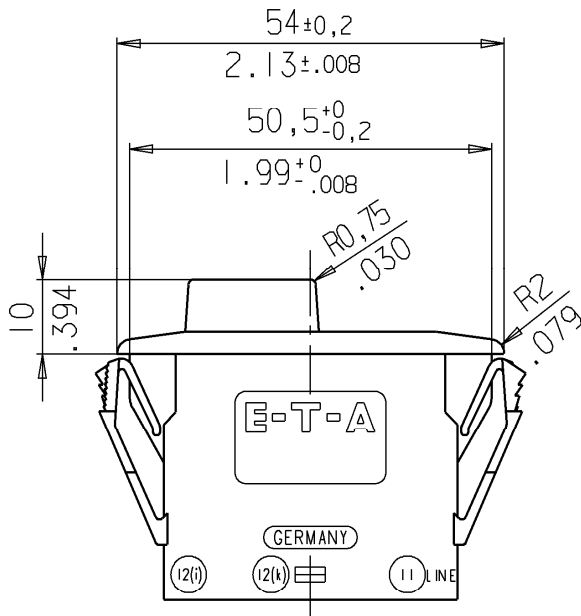
Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 13 of 37

F 3 1 F
6 7 8 9



F 3 1 G
6 7 8 9



This is a metric design and millimeter dimensions take precedence

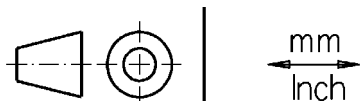
Edges for working parts: DIN 6784

Nominal dimensions without direct tolerance indication: ± IT 13

1 : 1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

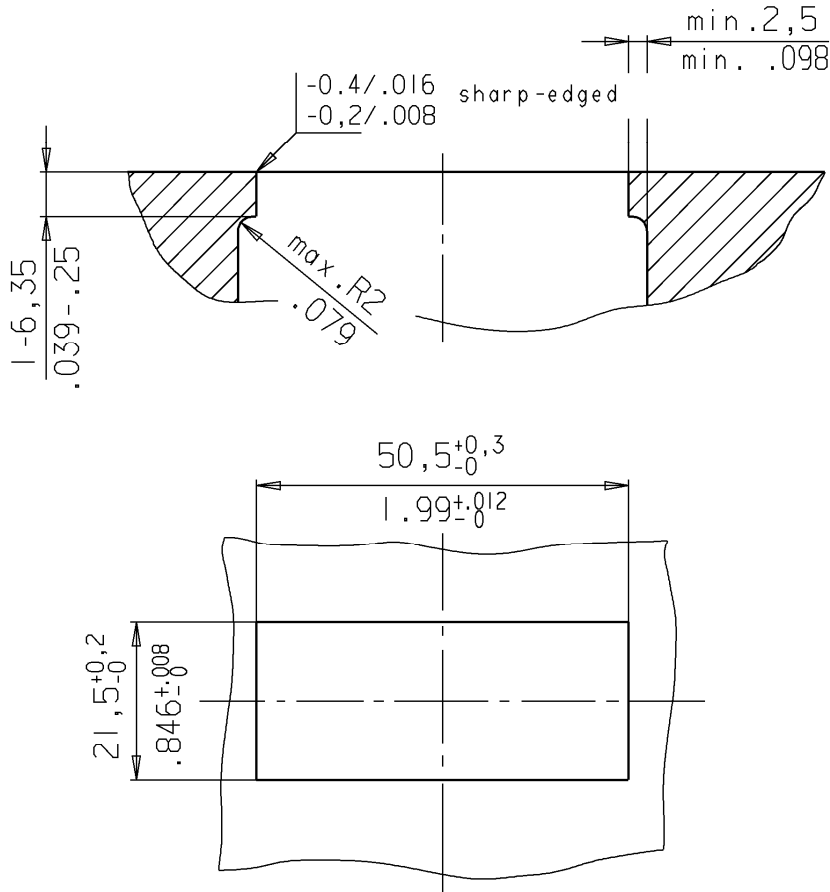
The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 14 of 37

Panel cut-out F3.F / F3.G



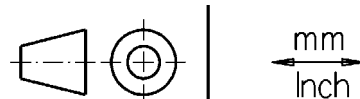
Edges of working parts: DIN 6784

This is a metric design and millimeter dimensions take precedence

Nominal dimensions without direct tolerance indication: $\pm IT 13$

1:1

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, E-T-A no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

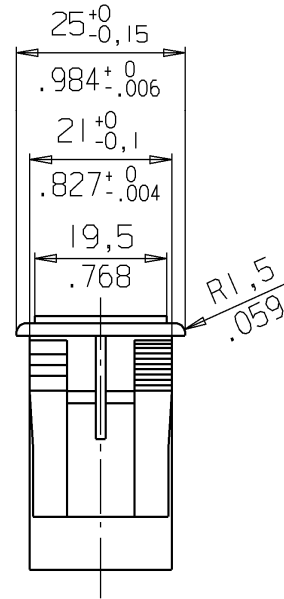
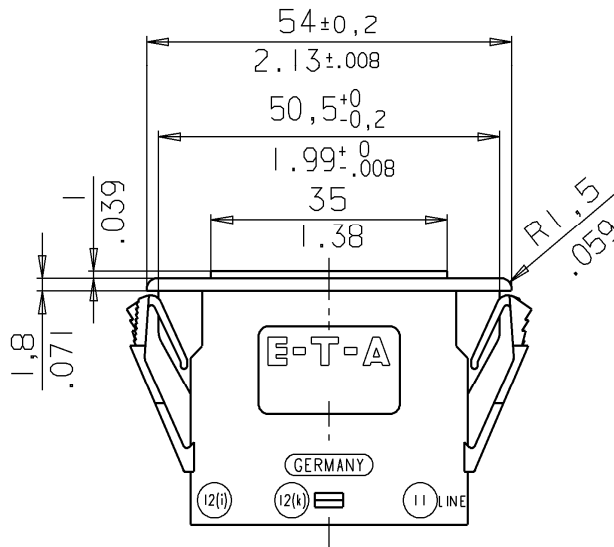


Overcurrent Circuit Breaker
thermal trip
3120-...-T1-...
one and two pole

Data Sheet
382.073.468
sheet 15 of 37

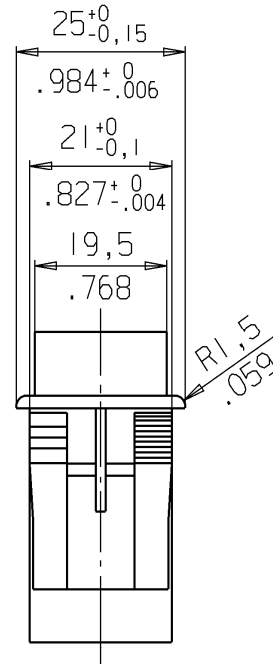
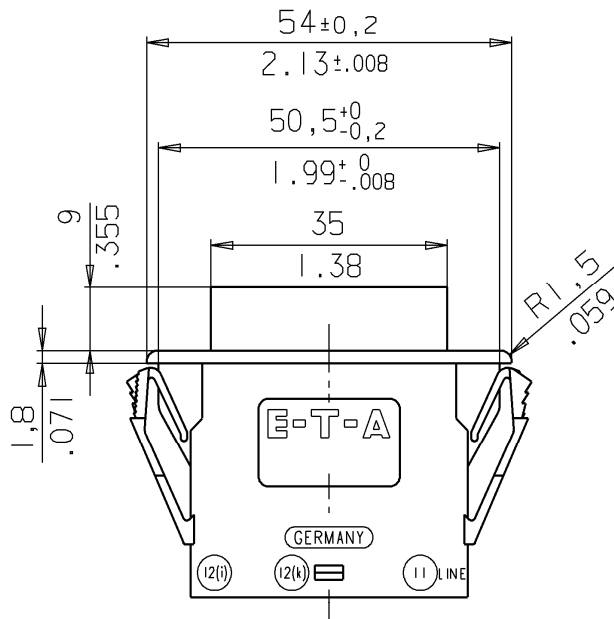
F 3 1
6 7 8 9

collar height .039 inch



F 3 3
6 7 8 9

collar height .355 inch



Edges of working parts: 6784

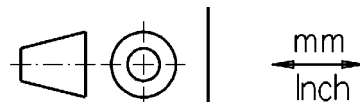
This is a metric design and millimeter dimensions take precedence

Nominal dimensions without direct tolerance indication: ± IT 13

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

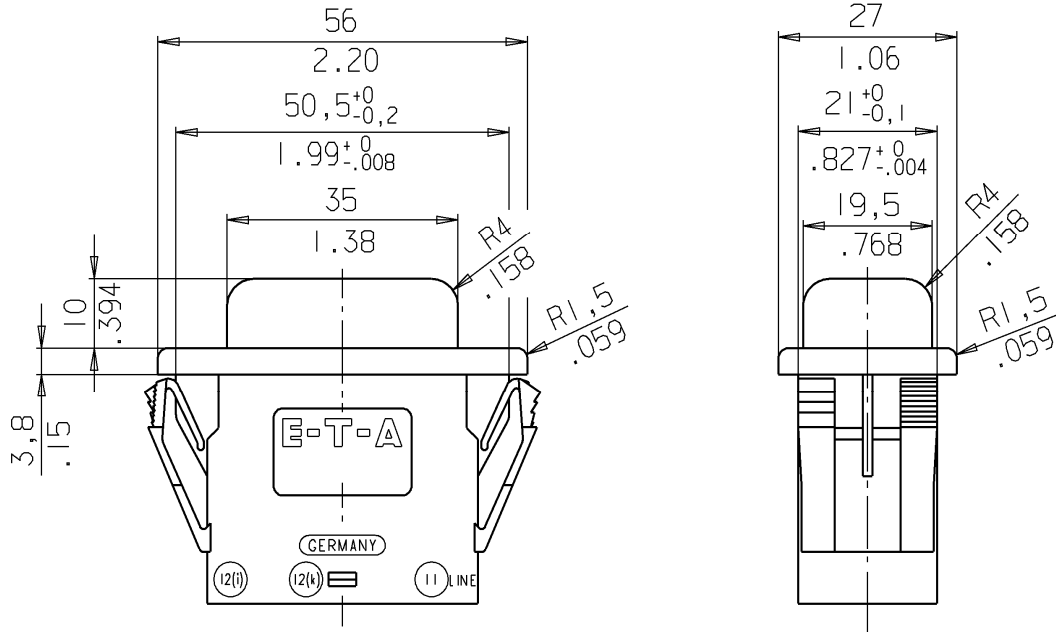


Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

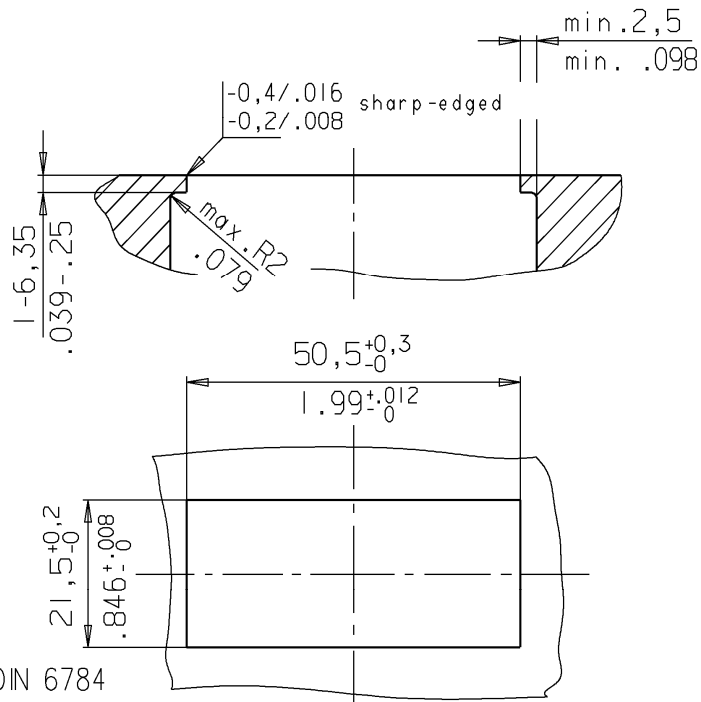
Data Sheet
382.073.468
sheet 16 of 37

F3.1 / F3.4
6 7 8 9

collar height .079 inch with splash water protection



Panel cut-out F3.1 / F3.3 / F3.4



This is a metric design and millimeter dimensions take precedence

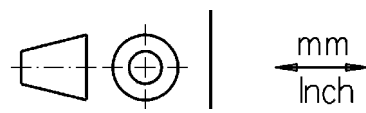
Edges of working parts: DIN 6784

Nominal dimensions without direct tolerance indication: ± IT 13

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice

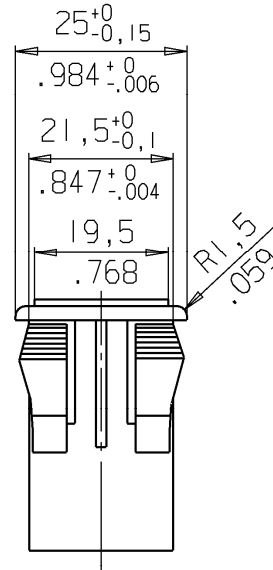
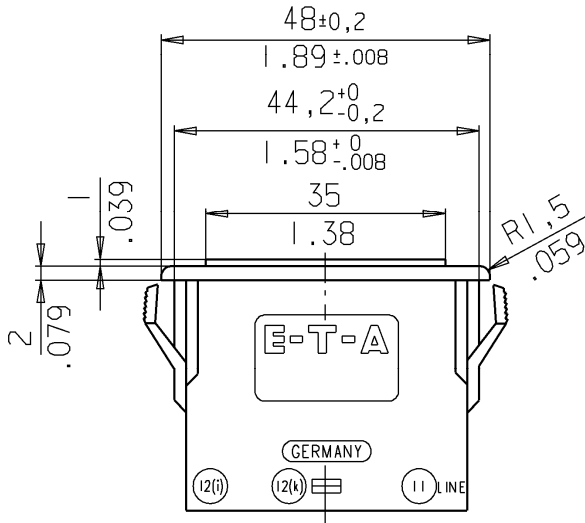


Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 17 of 37

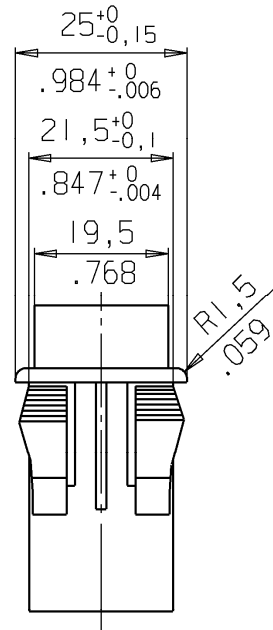
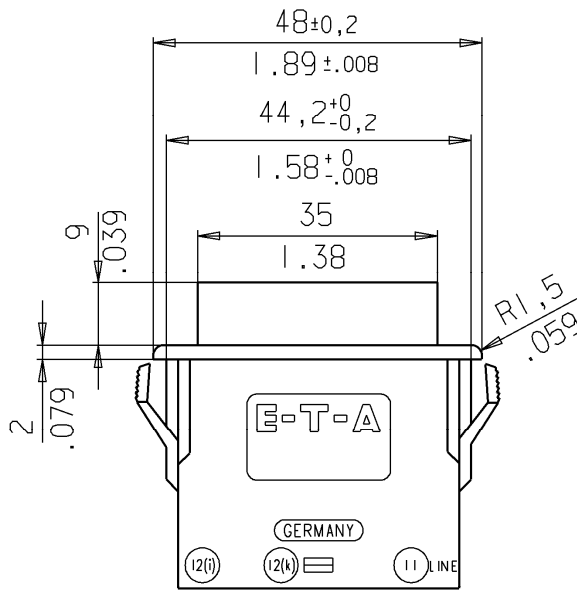
F 4 1 1
6 7 8 9

collar height .039 inch



F 4 1 3
6 7 8 9

collar height .355 inch



Edges of working parts: DIN 6784

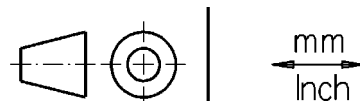
This is a metric design and millimeter dimensions take precedence

Nominal dimensions without direct tolerance indication: ± IT 13

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

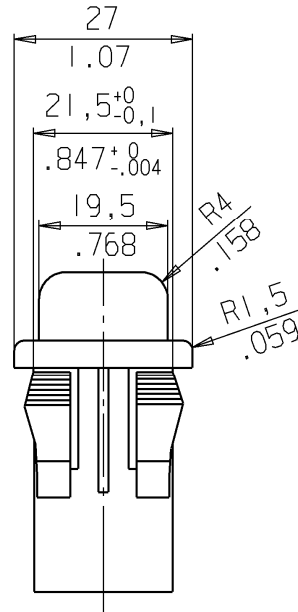
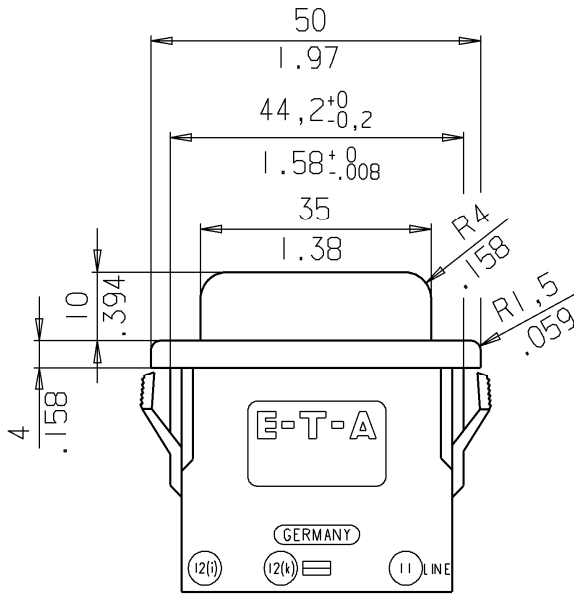


Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

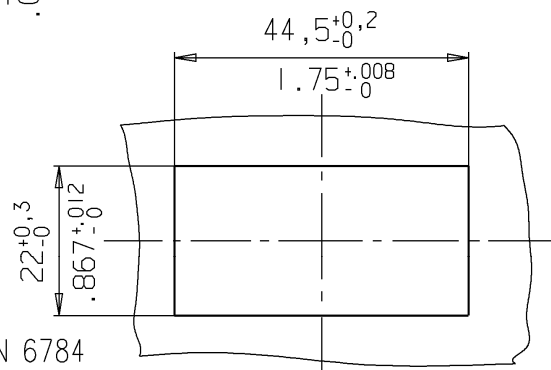
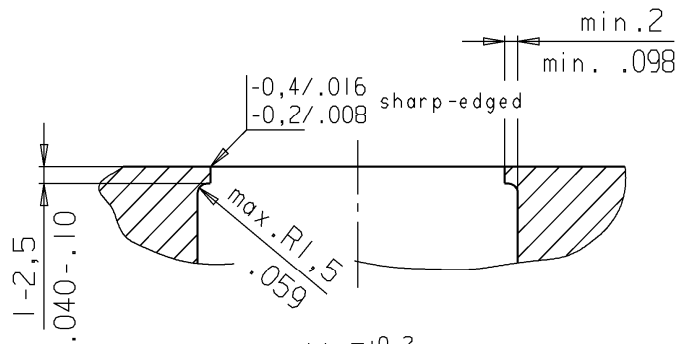
Data Sheet
382.073.468
sheet 18 of 37

F 4 1 4
6 7 8 9

collar height .079 inch with splash water protection



Panel cut-out F4.1 / F4.3 / F4.4



Edges of working parts: DIN 6784

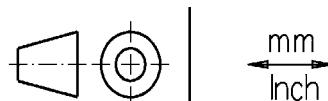
Nominal dimensions without direct tolerance indication: ± IT 13

This is a metric design and millimeter dimensions take precedence

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

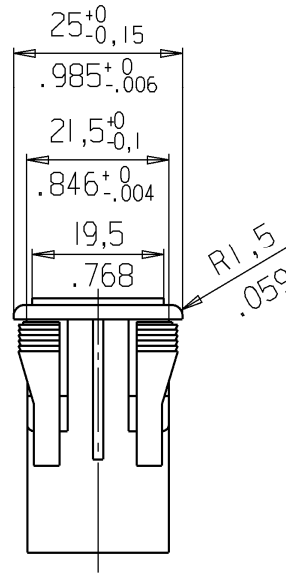
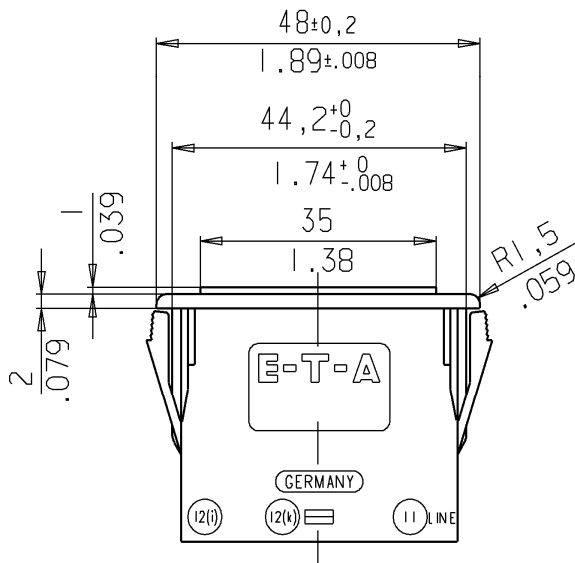


Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 19 of 37

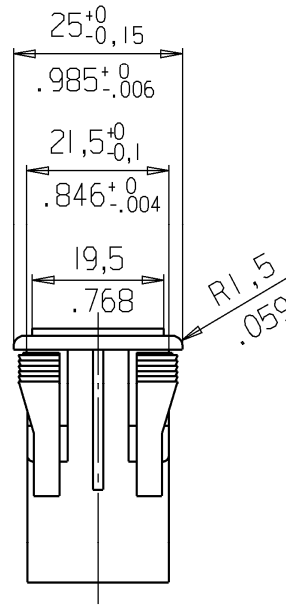
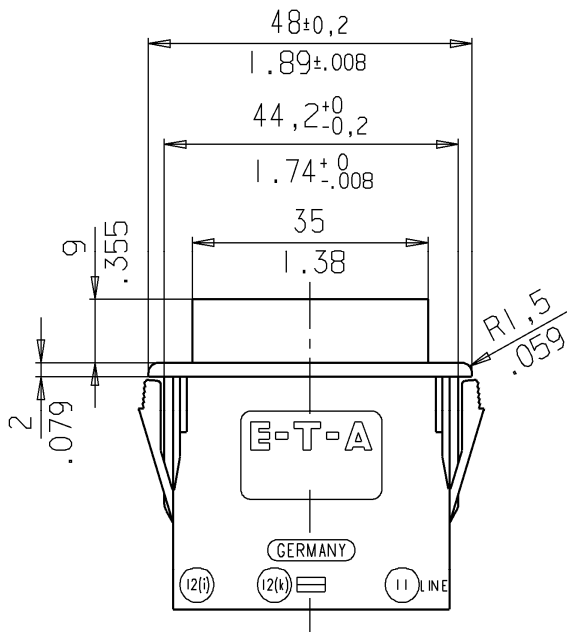
F 5.1.1
6 7 8 9

collar height .039 inch



F 5.1.3
6 7 8 9

collar height .355 inch



This is a metric design and millimeter dimensions take precedence

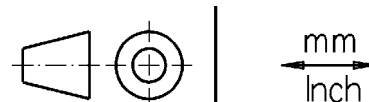
Edges of working parts: DIN 6784

Nominal dimensions without direct tolerance indication: ± IT 13

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

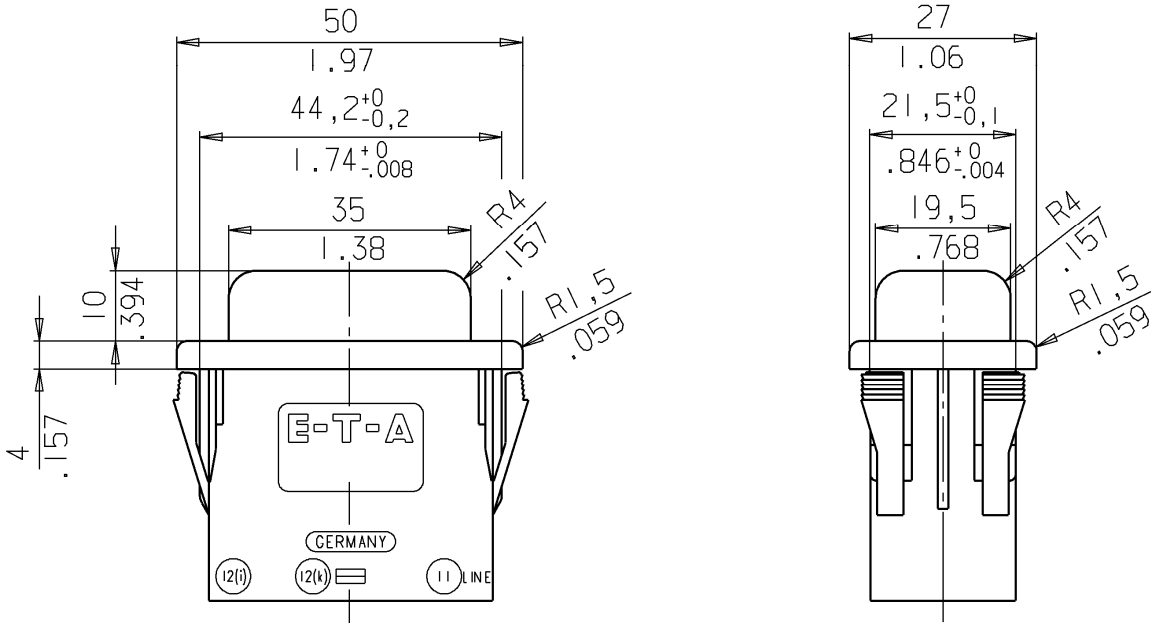


Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

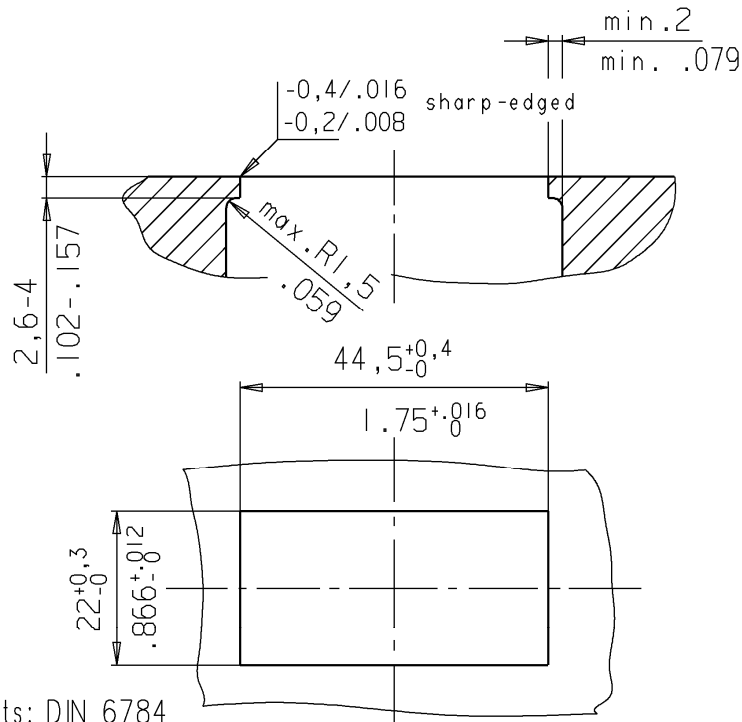
Data Sheet
382.073.468
sheet 20 of 37

F5.1 / F5.4
6 7 8 9

collar height .079 inch with splash water protection



Panel cut-out F5.1 / F5.3 / F5.4



Edges of working parts: DIN 6784

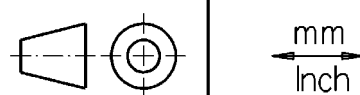
Nominal dimensions without direct tolerance indication: ± IT 13

This is a metric design and millimeter dimensions take precedence

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

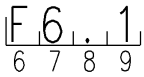


The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

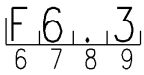
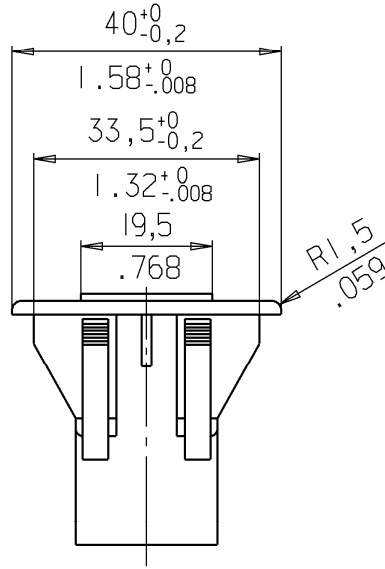
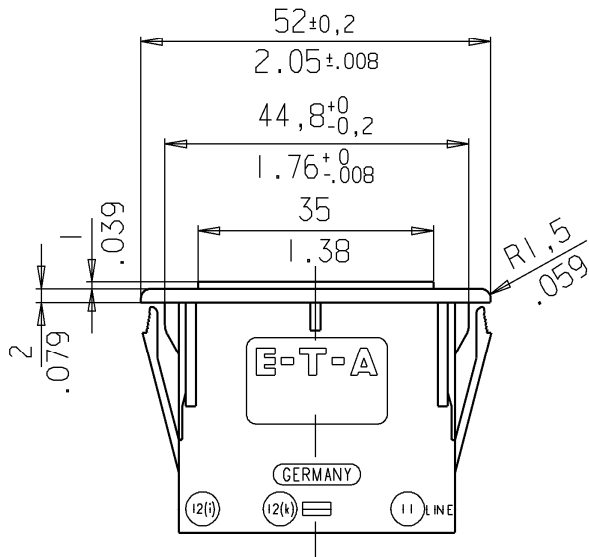


Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

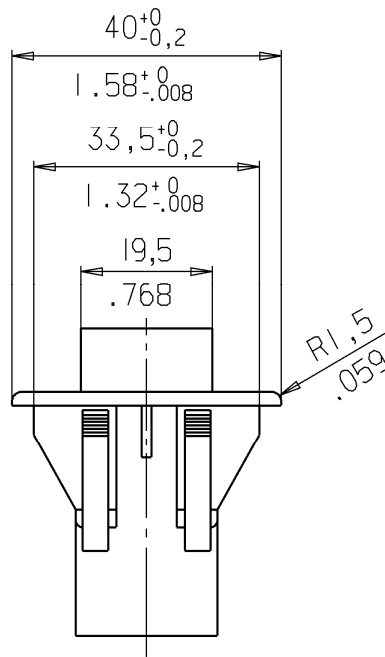
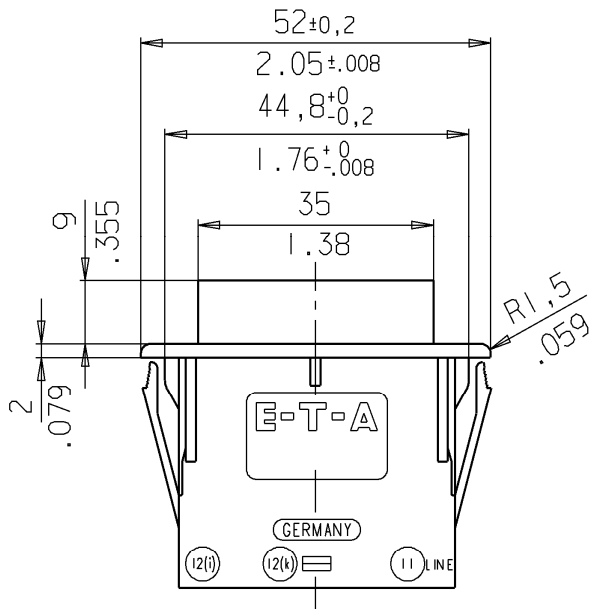
Data Sheet
382.073.468
sheet 21 of 37



collar height .039 inch



collar height .355 inch



The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

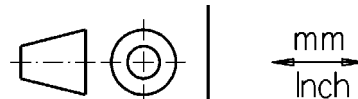
This is a metric design and millimeter dimensions take precedence

Edges of working parts: DIN 6784

Nominal dimensions without direct tolerance indication: ± IT 13

1:1

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



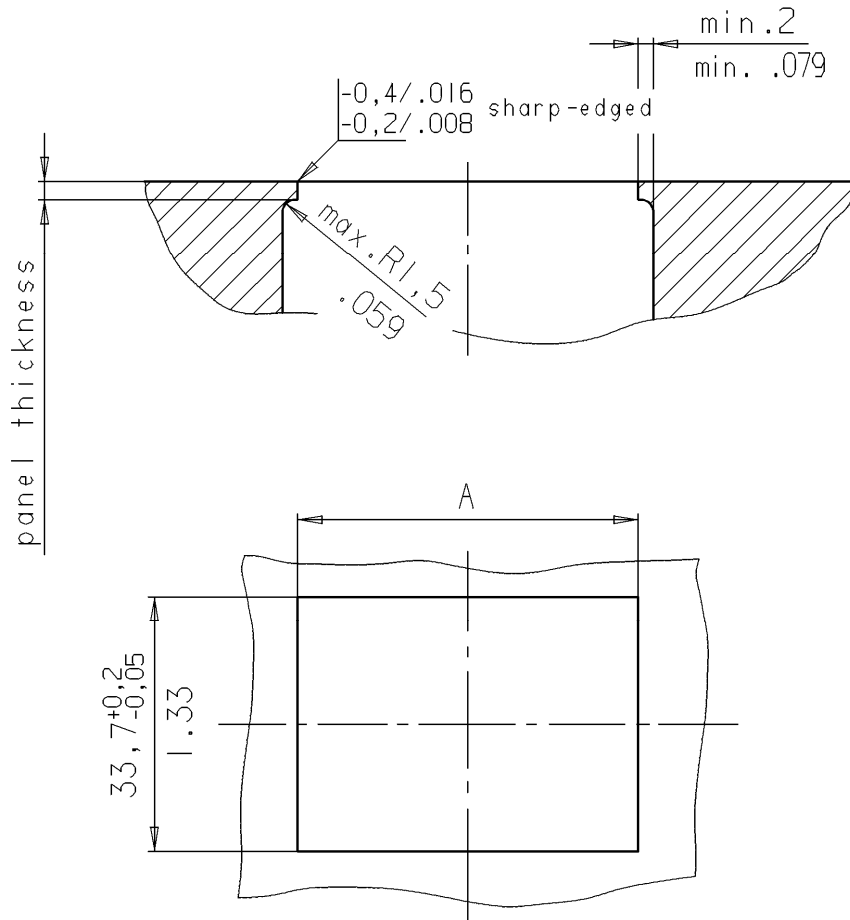
The information furnished is believed to be accurate and reliable. However, no responsibility is assumed for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-...T1-..
one and two pole

Data Sheet
382.073.468
sheet 22 of 37

Panel cut-out F6.1 / F6.3



Panel thickness	$.047^{+.016}_0$	$.063^{+.032}_0$	$.094^{+.040}_0$	$.133^{+.004}_0$
Dim. A	$1.77^{+.010}_0$	$1.77^{+.045}_0$	$1.77^{+.088}_0$	$1.77^{+.088}_0$

Edges of working parts: DIN 6784

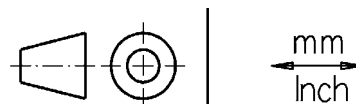
This is a metric design and millimeter dimensions take precedence

Nominal dimensions without direct tolerance indication: $\pm IT 13$

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				
i	18 338	23.07.01					

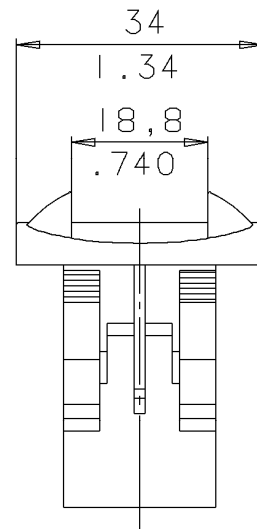
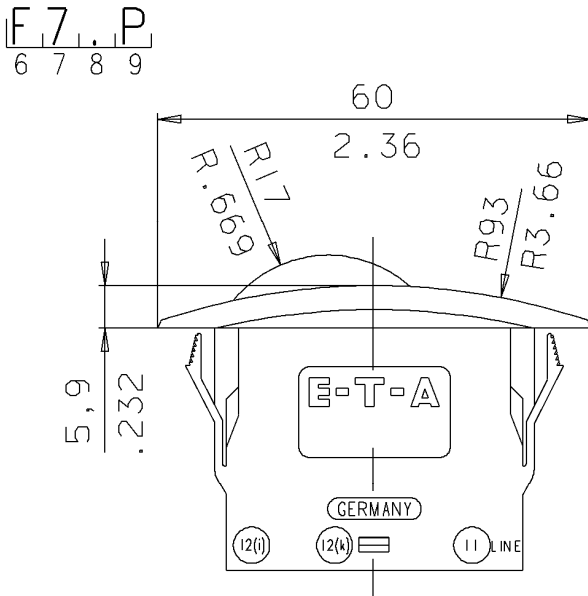
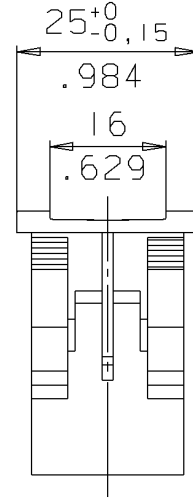
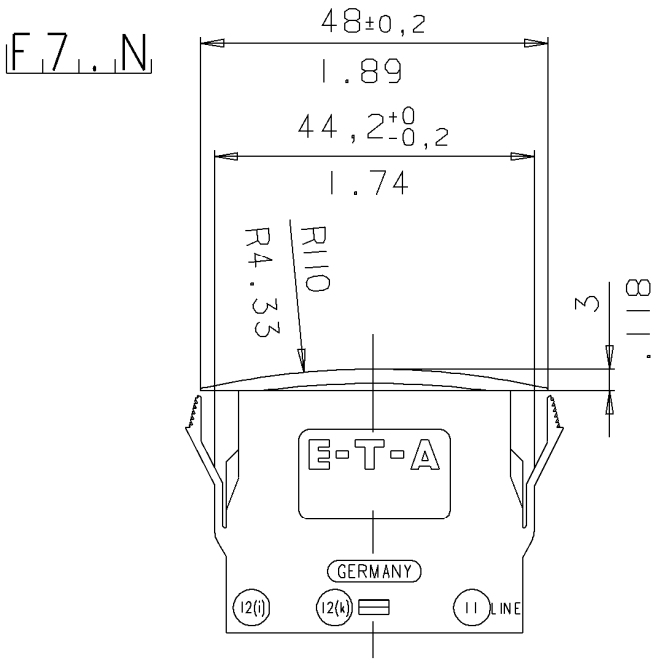


The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 23 of 37



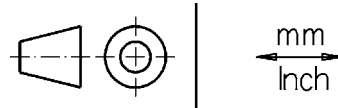
This is a metric design and millimeter dimensions take precedence

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Edges of working parts: DIN 6784
Nominal dimensions without direct tolerance indication: ± IT 13

1:1

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



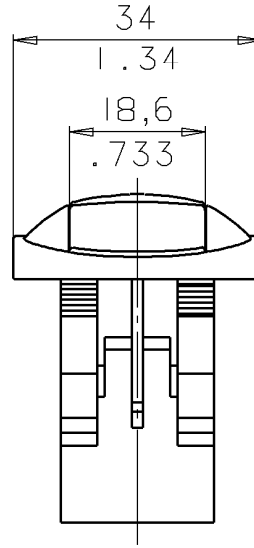
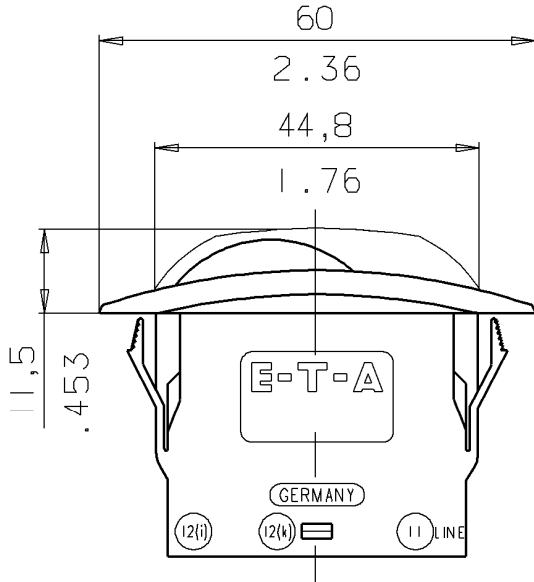
The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 24 of 37

E 7...Q



This is a metric design and millimeter dimensions take precedence

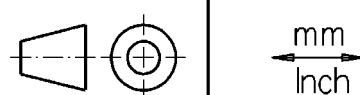
Edges of working parts: DIN 6784

Nominal dimensions without direct tolerance indication: $\pm IT 13$

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



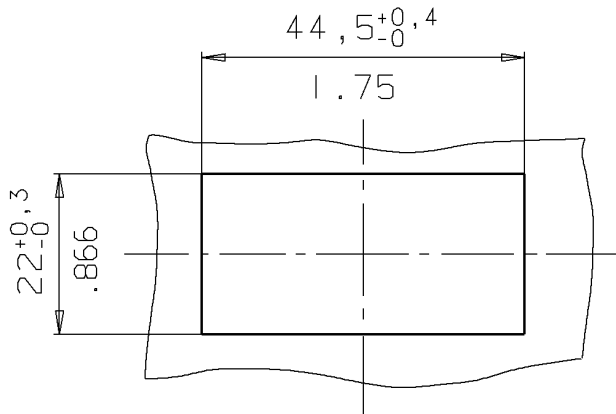
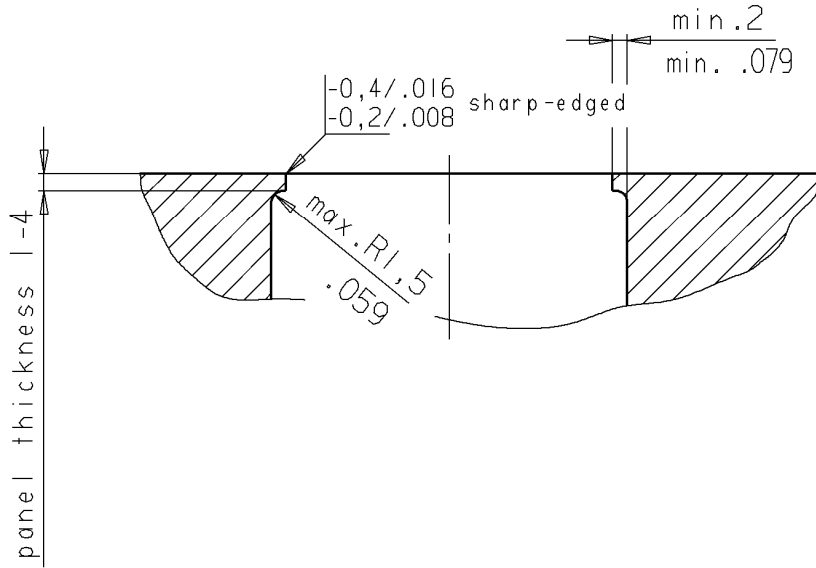
The information furnished is believed to be accurate and reliable. However, no responsibility for its use, in the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 25 of 37

Panel cut-out F7.N / F7.P / F7.Q



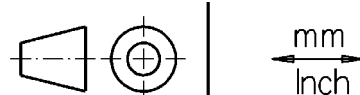
This is a metric design and millimeter dimensions take precedence

Nominal dimensions without direct tolerance indication: $\pm IT 13$

1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



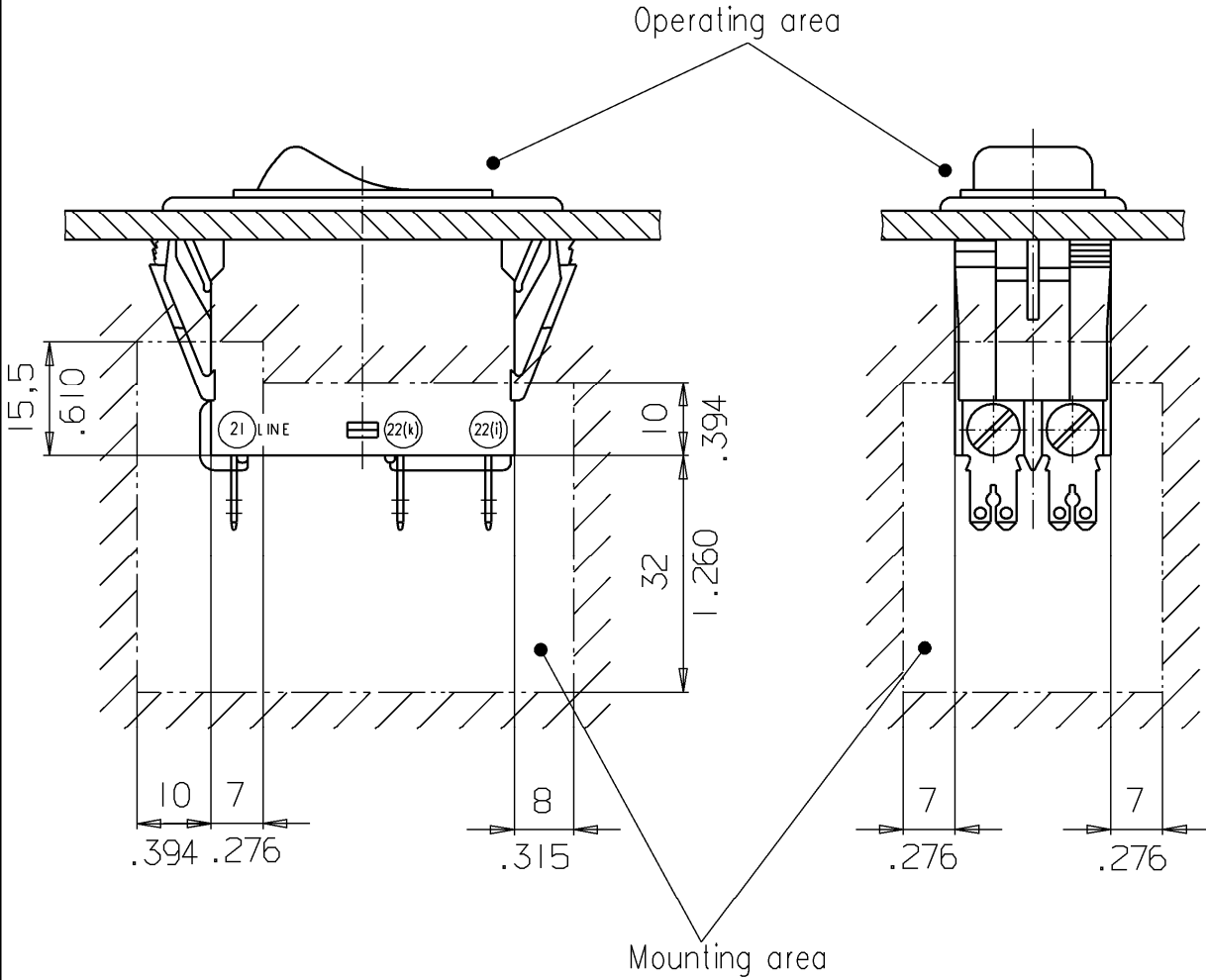
The information furnished is believed to be accurate and reliable. However, E-T-A assumes no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 26 of 37

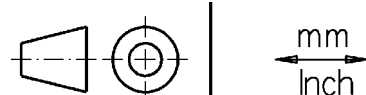
Safety distances required for installation
to protection class II



This is a metric design and millimeter dimensions take precedence 1:1

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				





Overcurrent Circuit Breaker
thermal trip
3120-...-T1-..
one and two pole

Data Sheet
382.073.468
sheet 27 of 37

2x flat quick connect terminal DIN 46244 - A2,8 - 0,8 - Ms
or
flat quick connect terminal DIN 46244 - A6,3 - 0,8 - Ms

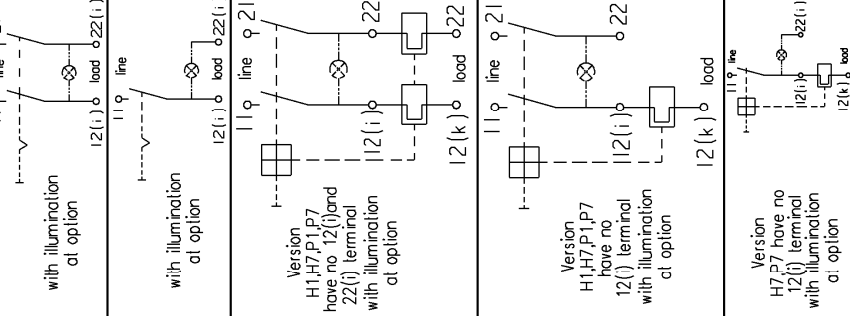


1 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Ordering number

3120-1-2-3-4-5-6-7-8-9-10-11-12-13-14-

	screw terminal M3,5x5 DIN 85 for mains supply		2x flat quick connect terminal		flat quick connect terminal		Connection diagram	
	11	21	11	21	12(i)	22(i)	12(k)	22(k)
2 pole, unprotected	X	X	X	X	X	X	X	X
1 pole, unprotected	X	X	X	X	X	X	X	X
2 pole, thermally protected	X	X	X	X	X	X	X	X
1 pole, thermally protected	X	X	X	X	X	X	X	X
2 pole, thermally protected	X	X	X	X	X	X	X	X
1 pole, thermally protected	X	X	X	X	X	X	X	X
2 pole, thermally protected	X	X	X	X	X	X	X	X
1 pole, thermally protected	X	X	X	X	X	X	X	X
1 pole, thermally protected	X	X	X	X	X	X	X	X



Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

The information furnished is believed to be accurate and reliable. However, no responsibility is assumed for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

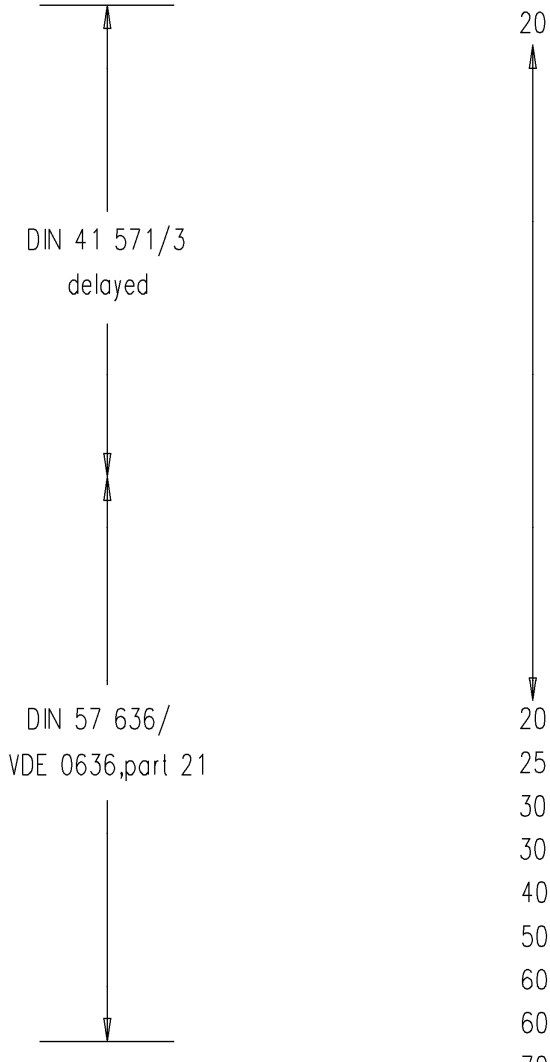


Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 28 of 37

Back-up fuses to ensure short-circuit protection

E-T-A Current rating (A)	Back-up fuses to DIN Current rating (A)	Back-up fuses to UL 1077 Current rating (A)
0.1	0.20	20
0.2	0.40	
0.3	0.63	
0.4	1.00	
0.5	1.25	
0.6	1.40	
0.8	1.60	
1.0	2.00	
1.2	2.00	
1.5	3.15	
2.0	4.00	
2.5	16	
3.0	16	
3.5	16	
4.0	20	
4.5	20	
5.0	20	20
6.0	25	25
7.0	25	30
8.0	25	30
10.0	25	40
12.0	25	50
14.0	25	60
16.0		60
18.0	32	70
20.0	32	80



Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



Ordering number code

3 120-F 321 - N7 T1 - W12A B 4 - 10A

1 2 3 4 5 6 7 8 9 10 11 12 13

1. Type number

3120: Thermal or thermal-magnetic circuit breaker, single or double pole (with ON / OFF switch only option)

2. Mounting method

F: Snap-in frame or screw mounting

3. Configuration

		panel cut-out	panel thickness	screw mounting	snap-in housing
1	for rocker	32.0 x 16.5 mm		x	
2	for 2 push buttons and water splash cover	50.0 x 26.0 mm		x	
3	for rocker or push buttons	50.5 x 21.5 mm	1.0 - 6.35 mm		x
4	for rocker	44.5 x 22.0 mm	1.0 - 2.5 mm		x
5	for rocker	44.5 x 22.0 mm	2.6 - 4.0 mm		x
6	for rocker	45.0 x 33.7 mm	1.2 - 3.4 mm		x
7	for rocker	44.5 x 22.0 mm	1.0 - 4.0mm		x

4. Number of poles

0	2 pole, unprotected, switch only
1	1 pole, thermally protected
2	2 pole, thermally protected
5	2 pole, thermally protected on one only
6	1 pole, unprotected, switch only

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

The information furnished is believed to be accurate and reliable. However no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 30 of 37

5. Style, accessory

		water splash protection	without collar	collar height			mounting method configuration						
				1mm	2mm	9mm	F1	F2	F3	F4	F5	F6	F7
1				X					X	X	X	X	
3						X			X	X	X	X	
4		X			X				X	X	X		
5					X				X	X	X		
6	mounting thread 2 x 6-32 UNC						X						
7	mounting thread 2 x M3,5						X						
8	mounting thread 4 x 6-32 UNC						X						
9	mounting thread 4 x M3,5						X						
A	with transverse hole 4mm dia					X			X	X	X	X	
B	current rating marked on top of flange			X					X	X	X	X	
C	with additional sealing (sealing grease)	X			X				X	X	X		
D	with silicone cover	X			X				X	X	X		
E	with silicone cover and additional sealing (sealing grease)	X			X				X	X	X		
F	frame with 2 push buttons							X	X				
G	frame with 1 push button								X				
H	I and 0 marked on top of flange			X					X	X	X	X	
K	I and 0 marked on top of flange					X			X	X	X	X	
L	I and 0 marked on top of flange			X					X	X	X	X	
M	I and 0 marked on top of flange					X			X	X	X	X	
N	colour grey (stratos grey), new design		X										X
P	Snap-on actuator guard preventing inadvertent operation		X										X
Q	Snap-on splash cover	X	X										X
Z	Snap-in frame			X					X				

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				



6. Terminal design

blade terminals DIN 46 244 - C				number of poles				
Terminal code			number of poles					
12(i), 22(i) A3 terminals	12(k), 22(k)	11, 12	0	1	2	5	6	
A1	x	with screw ISO 1580 - M3,5 and clamping plates		x	x			
A2	x	with M3,5 screw with +/- slot and clamping plates		x	x	x		
A3	x	with M3,5 screw with +/- slot and clamping plates and A3 terminals	x	x	x	x	x	
B1	x	with screw ISO 1580 - M3,5 and washer and tab DIN 46244-C	x	x	x	x	x	
B2	x	with screw ISO 1580 - M3,5 and washer and tab DIN 46 244-C		x	x	x		
G7	x	with screw ISO 1580 - M3,5	x	x	x	x	x	
H7	x	with screw ISO 1580 - M3,5		x	x	x		
K7	x	with M3.5 screw with +/- slot		x	x	x		
L7	x	with M3.5 screw with +/- slot	x	x	x	x	x	
N7	x	x	x	x	x	x	x	
P7	x	x		x	x	x		

Unprotected chambers only with B1, G7, L7 or N7, but without terminal 12 (k) or 22 (k)

7. Characteristic curve

		number of poles				
		0	1	2	5	6
M1	thermal - magnetic		x	x	x	
Q1	switch only; 50,000 operations, max 20A, cosφ 1, 250 V	x				x
T1	thermal 1. I _N - 1.4 x I _N		x	x	x	
X.	special calibration		x	x	x	

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

The information furnished is believed to be accurate and reliable. However no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 32 of 37

8. Actuator style

		Style																					
		1	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H	K	L	M	N	P	Q
A	rocker																				x	x	x
D	1 push button															x							
K	rocker, momentary switch	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x			
M	rocker	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x			
S	2 push buttons														x								
U	rocker, momentary switch	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x			
W	rocker	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x			
X	custom designed rocker	x	x		x	x	x	x	x	x	x						x	x	x	x			
Z	1 push button, momentary switch															x							

For markings of A, K, M, U W and X see sheets 33 - 35

9. Actuator colour

			Actuator style								
opaque (without illumination)	translucent (suitable for illumination)	colour	A	D	K	M	S	U	W	X	Z
01		black		x	x	x	x	x	x	x	x
02		white			x	x		x	x		
04		red		x	x	x	x	x	x		x
06		blue			x	x		x	x		
08		light grey			x	x		x	x		
09		green			x	x		x	x		
	12	white		x	x	x	x	x	x		x
	14	red			x	x		x	x		
	15	orange			x	x		x	x		
	19	green		x	x	x	x	x	x		x
20	30	blue (katana blue)	x								

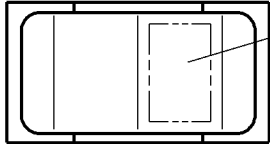
Special version											
2 push buttons of different colours	button „ON“ (translucent)	button „OFF“ (opaque)	A	D	K	M	S	U	W	X	Z
GR	green	red					x				
WB	white	black					x				
WR	white	red					x				

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	ÄM	Date	Name	Index	ÄM	Date	Name
g	17 866	26.06.00	K.Go				
h	18 056	13.12.00	K.Go				



10. Actuator marking
rocker



illumination window

	Actuator						Actuator / colour			
	A	K	M	U	W	X	U01	U02	W01	W02
A	—			×	×					
B	EIN			×	×					
C	ON			×	×					
D	0	—		×	×					
E	AUS	EIN		×	×					
F	OFF	ON		×	×					
G	OFF	ON		×	×					
H	OFF	ON		×	×					
J	○	—		×	×					
K	○	—		×	×					
L	OFF	○	ON	×	×					
M		TRIPPED	PRESS TO RESET	×	×					
N		BY HAND	NO	×	×					
P	OFF	0	NO	×	×					
Q	0	—					×	×	×	×

marking impressed

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

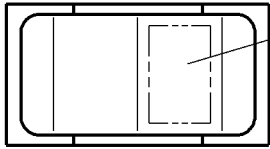
The information furnished is believed to be accurate and reliable. However, no responsibility is assumed for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 34 of 37

10. Actuator marking
rocker



illumination window

				Actuator					
				A	K	M	U	W	X
R	OFF	NO					X	X	
S	OFF	ON					X	X	
T	BATT 1	PUSH ON					X	X	
U	BATT 2	PUSH ON					X	X	
V	MAIN PUMP	PUSH ON					X	X	
W	HORI ZONT	PUSH ON					X	X	
X			without marking				X	X	X
Y	TURN BANK	PUSH ON					X	X	
Z	TAXI LITE	PUSH ON					X	X	
1	LAND LITE	PUSH ON	LAND LITE				X	X	
2	CABIN LITE	PUSH ON	CABIN LITE				X	X	
3	POS LITE	PUSH ON	POS LITE				X	X	
4	AUX PUMP	PUSH ON	AUX PUMP				X	X	
5	SEAT HEAT	PUSH ON	SEAT HEAT				X	X	
6	CYRO	PUSH ON	CYRO				X	X	

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

The information furnished is believed to be accurate and reliable. However, no responsibility is assumed for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

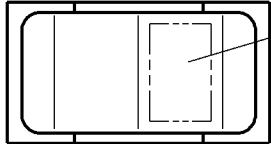
The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 35 of 37

10. Actuator marking
rocker



illumination window

				Actuator					
				A	K	M	U	W	X
7	ACL	PUSH ON	ACL				X	X	
8	VENT	PUSH ON	VENT				X	X	
9	STROBE LITE	PUSH ON	STROBE LITE				X	X	
A	PILOT HEAT	PUSH ON	PILOT HEAT		X	X			
B	OFF	ON			X	X			
C	OFF	ON	LIGHT		X	X			
D	OFF	ON	ROTOR		X	X			
E	GEN	PUSH ON			X	X			
F	NO		OFF		X	X			
G					X	X			

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

The information furnished is believed to be accurate and reliable. However no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 36 of 37

10. Actuator marking

Push button

		Actuator		
		D	S	Z
X	without marking	x	x	x
Y	with black marking on actuator face	x	x	x

11. Actuator illumination

		Actuator			Actuator colour												
		D, S, Z	K,M,U,W	X	01	02	04	06	08	09	12	14	15	19	GR	WB	WR
B	Lamp illumination	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
L	Lamp illumination	x			x	x	x	x	x	x	x	x	x	x	x	x	x
G	LED illumination - green	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
R	LED illumination - red	x	x		x	x	x	x	x	x	x	x	x			x	x
Y	LED illumination - yellow	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x

12. Illumination voltage range

		marked	Actuator illumination								
			B	B	L	G	R	R	Y	Y	
0	4 - 7 V	6 V	x	x		x	x		x		
1	10 - 14 V	12 V	x	x		x	x		x		
2	20 - 28 V	24 V	x	x		x	x		x		
3	90 - 140 V	115 V	x		x						
4	185 - 275 V	230 V	x		x						
5	52 - 54 V	48 V	x	x				x		x	
6	320 - 450 V	400 V	x		x						
7	50 - 70V	60 V						x		x	
			Actuator	K,M,U,W	x		x	x	x	x	x
				D,S,Z		x	x	x	x	x	x
			Type of current	DC	x	x	x	x	x	x	x
				AC	x	x	x	x		x	

Index	AM	Date	Name	Index	AM	Date	Name
g	17 866	26.06.00	K.Go				

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.

The information furnished is believed to be accurate and reliable. However no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration. Protection mark according to DIN 34.



Overcurrent Circuit Breaker
thermal trip
3120-...-..T1-..
one and two pole

Data Sheet
382.073.468
sheet 37 of 37

13. Current ratings

current rating (A)	characteristic curve						
	M1	T1	Q1	X1	X2	X3	X4
0.05		x					
0.1	x	x					
0.15	x	x					
0.2	x	x					
0.25	x	x					
0.3	x	x					
0.35	x	x					
0.4	x	x					
0.45	x	x					
0.5	x	x					
0.55	x	x					
0.6	x	x					
0.65	x	x					
0.7	x	x					
0.8	x	x					
0.9	x	x					
1	x	x					
1.2	x	x		x			
1.4	x	x					
1.5	x	x					
1.7	x	x					
1.8	x	x					
2	x	x					
2.5	x	x		x	x	x	
2.8	x	x					
3	x	x		x	x	x	x
3.5	x	x					
4	x	x			x	x	x
4.5	x	x			x		
5	x	x			x	x	
6	x	x		x			
7	x	x			x		
8	x	x			x		
9	x	x					
10	x	x					
11	x	x					
12	x	x					
13	x	x					
14	x	x			x		
15	x	x		x	x		
16	x	x					
17		x			x		
18		x					
20		x	x				

Note: Boldface references are in conformance with the ordering informations shown in the E-T-A Catalogue

Index	ÄM	Date	Name	Index	ÄM	Date	Name
g	17 866	26.06.00	K.Go				