

# Data Sheet

## 6136 Power entry module

### CONTENT

<b>1</b>	<b>GENERAL DESCRIPTION .....</b>	<b>2</b>
<b>2</b>	<b>DIMENSIONS .....</b>	<b>3</b>
<b>3</b>	<b>ELECTRICAL DATA.....</b>	<b>3</b>
3.1	GENERAL :.....	3
3.2	APPLIANCE INLET :.....	4
3.3	CIRCUIT BREAKER FOR EQUIPMENT :.....	4
3.3.1	RATED CURRENT, VOLTAGE AND OTHER ELECTRICAL RATINGS :.....	4
3.3.2	TRIPPING CHARACTERISTIC .....	4
3.3.3	ENVIRONMETAL CONDITION.....	5
3.4	DIAGRAM .....	6
<b>4</b>	<b>MECHANICAL DATA .....</b>	<b>6</b>
4.1	MOUNTING : .....	6
4.2	TERMINALS :.....	6
4.3	PACKING AND WEIGHT :.....	6
<b>5</b>	<b>MATERIALS .....</b>	<b>6</b>
<b>6</b>	<b>ENVIRONMENTAL CONDITION .....</b>	<b>7</b>
6.1	TEMPERATURES :.....	7
6.2	VIBRATION AND SHOCK RESISTANCE : .....	7
6.3	DEGREE OF PROTECTION : .....	7
<b>7</b>	<b>APPROVALS.....</b>	<b>7</b>
<b>8</b>	<b>CONFIGURATION CODE.....</b>	<b>8</b>

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	1 of 8	

## 1 General Description

### General :

The power entry modules types **6136** series are suitable for use in information technology equipment acc. to standard IEC / EN / UL 60950-1.

The power entry module is internally completely wired or unwired.

Suitable for use in medical equipment acc. to standard IEC /EN /UL 60601-1

### Appliance inlet :

For a pin temperature of max. 70° C.

The appliance inlet meets the following standards :

- IEC / EN 60320-1 / C20 with TA35 1pole
- UL 60320-1
- CSA C22.2 no. 60320-1
- GB/T 17465-1

Protection class I ( L / N / PE ) according to IEC 61140.

### Circuit breaker :

Circuit breaker for equipment TA35

(detail information see catalogue "Circuit Breakers for Equipment")

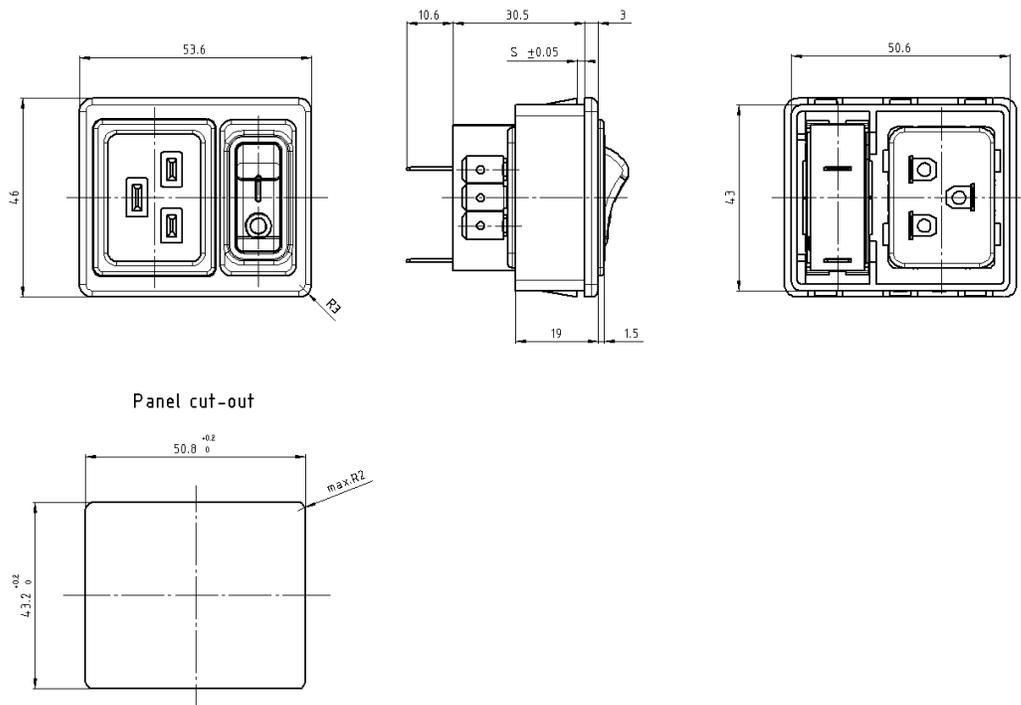
- options :
- 1-pole, without thermal overload protection
  - 1-pole, with 1-pole thermal overload protection

The Circuit breaker meets the following standards :

- IEC 60934
- UL 1077
- CSA C22.2 no. 235
- GB/T 17701

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	2 of 8	

## 2 Dimensions



## 3 Electrical Data

### 3.1 General :

Rated voltage $U_n$	250 V AC	50 / 60 Hz
Rated current $I_n$	16 A	according to IEC / EN
	20 A	according to UL / CSA
Insulation resistance (500 V DC ; 1 min.)	> $10^3$ M $\Omega$	between live parts of different potentials.
	> $10^3$ M $\Omega$	between protective conductor PE and live parts.
Dielectric strength (50 Hz ; 1 min.)	> 2.5 kV	between live parts of different potentials.
	> 3 kV	between protective conductor PE and live parts.
Impulse withstand voltage $\hat{U}$ 1,2/50	> 4 kV	between live parts of different potentials
	> 6 kV	between protective conductor PE and live parts.
Overvoltage category	I - III	according to IEC 60664-1
Clearance and creepage distances	> 3 mm	between live parts of different potentials.
	> 4 mm	between protective conductor PE and live parts.
Pollution degree	1 - 3	according to IEC 60664-1
Protection class (Protection against electric shock)	Suitable for appliances of protection class I , acc. to IEC 61140 respectively acc. to VDE 0106 / part 1	

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	3 of 8	

### 3.2 Appliance inlet :

Dimensions acc. to IEC / EN 60320-1 C 20 for protection class I ( L / N / PE )

Pin temperature max. 70° C

### 3.3 Circuit breaker for equipment :

#### 3.3.1 Rated current, voltage and other electrical ratings :

Bimetal	Insulation resistance (main circuit)	Protection against electric shock
Indirect heated: 0.05...2.8A Direct heated: 3...20A	DC 500 V > 100 MOhm	Class I, II (to operating means)

Rated Insulation Voltage	Overvoltage category	Dielectric strength
AC 250 V AC 440 V	II	50Hz: 1500V Impulse: 2000V [1.2/50us]

No of poles	(max) Voltage rating	Current rating	Cond. SC-Rating (Inc) [with fuse]	Performance ("General Industrial")
TA35 – 1 pole	AC 240V [50/60Hz] DC 32V	AC/DC 0.05A – 20A	AC/DC 2000A (PC1 / Fuse *)	UG A (AC 240V; DC 32V), FW0, TC-1, OL0, SC(C1)

* Recommended Short Circuit-Fuse:	AC/DC 0.05A – 12A: 16A gG-Type / 15A J-Type (time delay) AC/DC >12A – 20A: 25A gG-Type / 25A J-Type (time delay)
-----------------------------------	---

Minimum Operation cycles (AC)	Minimum Operation cycles (DC)
Endurance (mech.): 50'000 cycles Endurance (on load): 30'000 cycles @ 1x In (cos phi = 0.6) Overload: (IEC 60934): 40 cycles @ 6xIn (cos phi = 0.6) (UL1077): 50 cycles @ 1.5xIn (cos phi = 0.75) [OL0]	Endurance (mech.): 50'000 cycles Endurance (on load): 30'000 cycles @ 1x In (L/R=2..3ms) Overload: (IEC 60934): 40 cycles @ 4xIn (L/R=2..3ms) (UL1077): 50 cycles @ 1.5xIn (t.c.=non. ind.) [OL0]

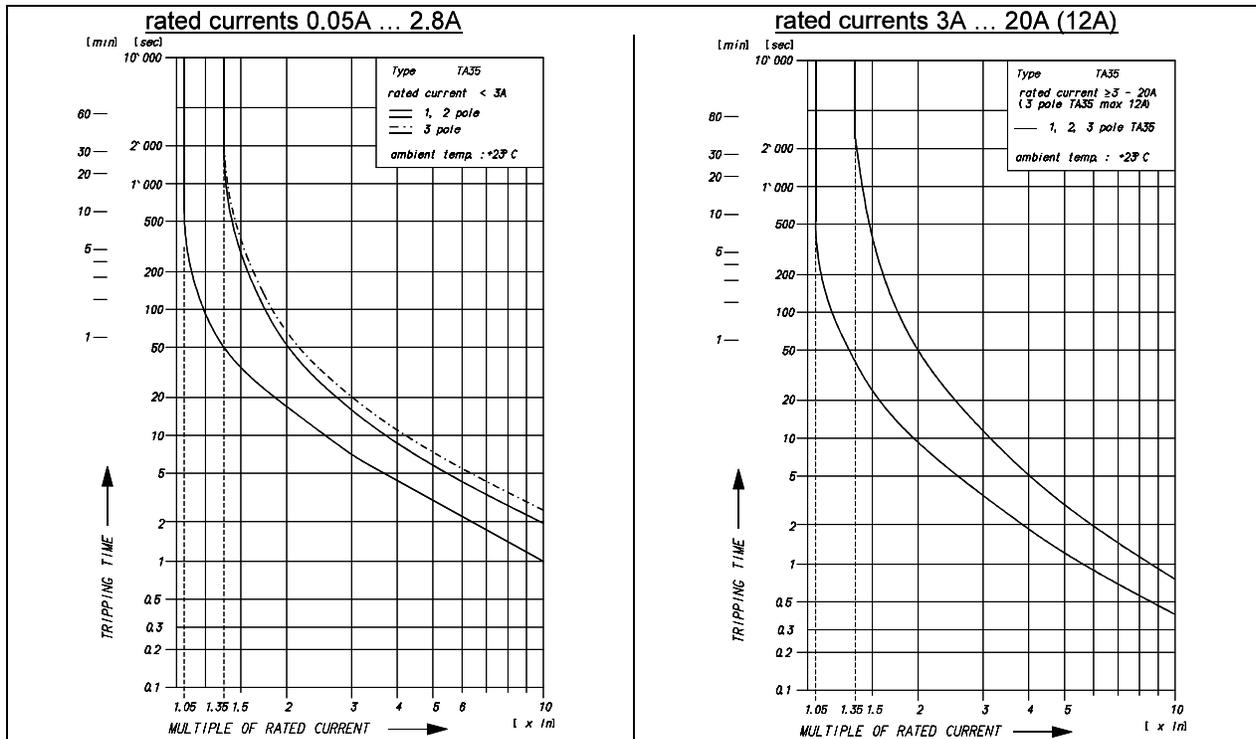
#### 3.3.2 Tripping characteristic

Method of operation:	Switch-Type (S) / Manual-Type (M)
Mode of tripping:	Thermal (TO)
Type of tripping:	Positively trip-free

Conventional non-tripping current (no trip within one hour)	1.05x In [TC1]
Conventional tripping current (tripping within one hour)	1.35x In [TC1]
Instantaneous tripping / non-tripping current	n / a

Tripping time of multiple rated current (reference temperature: 23°C)				
Rated current	0.05...2.8A			
Multiple of rated current (x In)	2	4	6	
Tripping time	1-pole	17...50 s	4 ... 8.5 s	2.4 ... 4 s
Rated current	3A ... 20A (12A*)			
Multiple of rated current (x In)	2	4	6	
Tripping time	1-pole	9 ... 50 s	1.8 ... 5.1 s	0.8 ... 2.0 s

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	4 of 8	



The above tripping characteristics apply to symmetrical overloads on all poles on the TA35 only.

At asymmetric overloads on multi-pole types, the tripping characteristic will change.

2-pole type TA35 is loaded at one pole only, the tripping current will be shifted by factor 1.05.

### 3.3.3 Environmental Condition

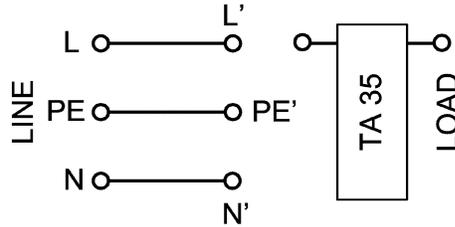
Operational temperature range:	- 10°C ... + 55°C
Storage temperature	- 20°C ... + 80°C
Reference temperature:	+ 23°C

#### Up- / derating factor

CBE tripping behaviour is dependent on temperature		Calculation example (only for approximate estimation)
Ambient temperature (°C)	factor	The unit is calibrated for an ambient temperature of + 23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor from the table at the left side.  <b>Example</b> for a 10 Amps, 1 pole type TA35 at 60°C: Rated current @ +23°C: In (23°C) = 10A Ambient Temperature: Ta = +60°C Correction factor: f = 1.06 New rated current @ +40°C: In (60°C) = 10A * 1.06 = 10.6  At an ambient temperature @ +60°C, a CBE with In=10.6A @ 23°C is to choose.
- 30	0.77	
- 20	0.81	
- 10	0.86	
- 5	0.88	
0	0.90	
+ 10	0.94	
<b>+ 23</b>	<b>1.00</b>	
+ 30	1.01	
+ 40	1.03	
+ 50	1.04	
+ 60	1.06	

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	5 of 8	

### 3.4 Diagram



## 4 Mechanical Data

### 4.1 Mounting :

Snap-in mounting from the frontside.

This mounting-system has the advantage of a simple and sure mounting.

### 4.2 Terminals :

Appliance inlet      L / N and PE  
 QC terminal 6.3x0.8 mm acc. to IEC 61210, nickel-plated (Ni)  
 Connection Inlet to CBE with stranded wire insulated AWG14

Circuit breaker TA35      QC terminal 6.3x0.8 mm acc. to IEC 61210, non-plated

### 4.3 Packing and weight :

Original packing      15 pcs.

Net weight per 1 pcs.      37 gr.      TA35 1-pole, without thermal overload protection  
    38 gr.      TA35 1-pole, with 1-pole thermal overload protection

## 5 Materials

	<u>Inlet</u>		<u>Circuit breaker TA35</u>		
	Socket	Case	Cover	Rocker	
Type	PA 6	PA 66	PA 66	PC	
Flame classe UL94	V-0	V-0	V-0	UL94 HB	
Comparative tracking index CTI	600 V	600 V	600 V	275 V	
Temp.-index RTI, electr.	125° C	150° C	150° C	135° C	
UL File-no.	E86034	E53898	E53898	E41613	

Live parts      Copper alloy, protected against corrosion.

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	6 of 8	

## 6 Environmental Condition

### 6.1 Temperatures :

Operating temperature	- 25° C up to + 70° C for Appliance inlet - 30° C up to + 60° C for TA35
Ambiente temperature	- 25° C up to + 25° C, but occasionally reaching + 35° C for Appliance inlet
Storage temperature	- 40° C up to + 85° C for Appliance inlet - 40° C up to + 60° C for TA35
Climatic category according to IEC 60068-1	25 / 085 / 21 for Appliance inlet 40 / 060 / 21 for TA35

### 6.2 Vibration and shock resistance :

Resistance to vibration according to IEC 60068-2-6	Test Fc ; Frequency range 10 - 500 Hz, cross-over frequency 60 Hz < 60 Hz constant amplitude of 0.75 mm > 60 Hz constant acceleration of 10 g
--	--

### 6.3 Degree of protection :

Degree of protection	IP40 according to IEC 60529 Front face of Power entry module.
----------------------	--

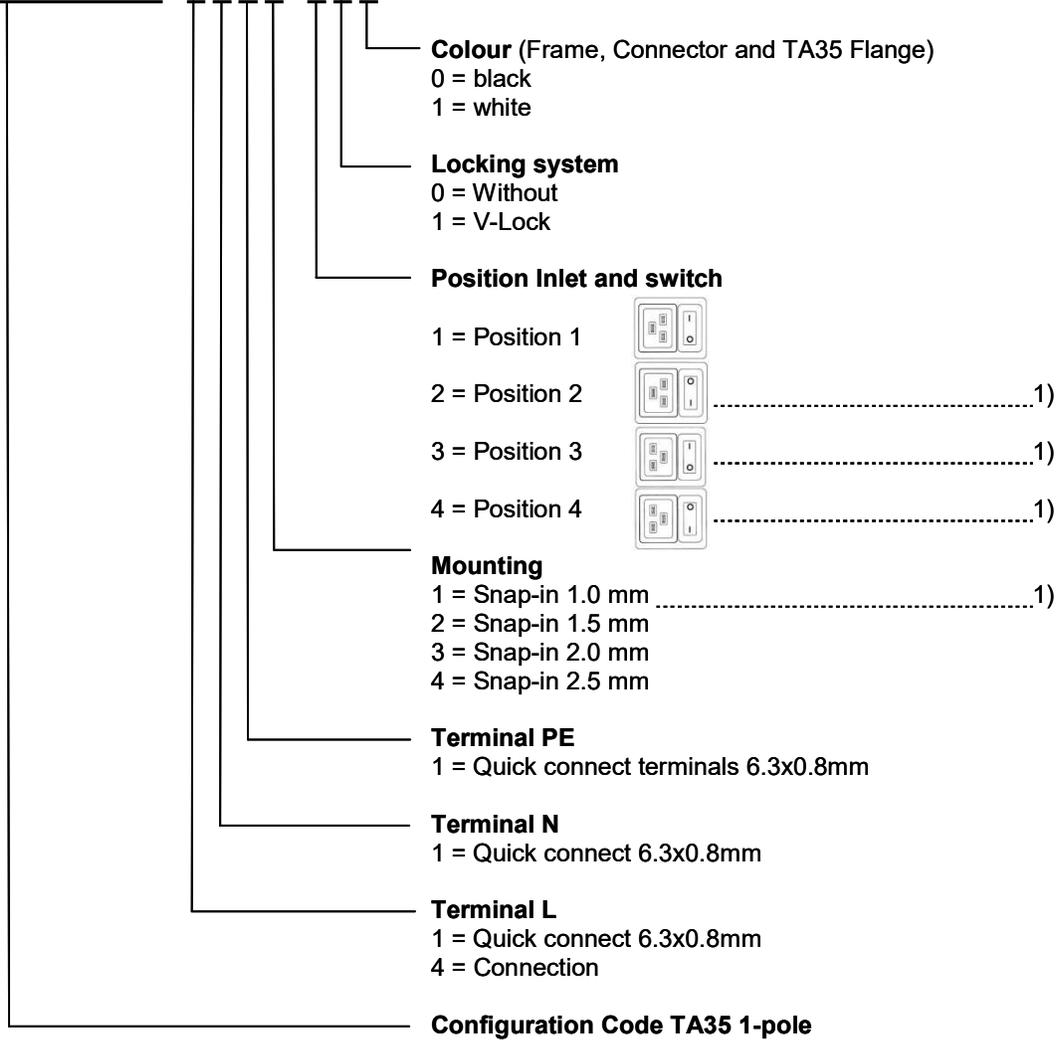
## 7 Approvals

Country	Certification Body	Type	Mark	File-no.
Europe	VDE	VDE Mark		40025196
U.S.A. / Canada	UL	Certification / Recognition		E 96454
China	CCC	Certificate		2019180204011399

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	7 of 8	

**8 Configuration Code**

6136 - XXXXXXXXXX-XXX - X X X X - X X X 0



1) Only on request

Product Documentation					Data Sheet 6136 Power entry module		
owner	creation date	release date	released by	change order no	rev	page	0105.2005
sariogar	23.10.2019	23.10.2019	sariogar	2018613	E	8 of 8	