



Specifications and technical data are subject to change without notice.
Please contact us to confirm relevant information on ordering.

Shanghai Ebasee Electric Co., Ltd

Add: No.18, Gutang Rd, Shanghai 201209, China

Tel: +86 21 5032 0898

Fax: +86 21 5032 0828

<http://www.ebasee.com>



APP



CONTROL ELECTRIC

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Ebasee
Smart Living Green Ebasee
Ebasee Ltd., China

Company Profile

As a leading supplier in the low voltage electrics industry, Shanghai Ebasee Electric Co., Ltd. products have been used for residential, commercial and industrial applications with its quality and service. EBASEE brand is recognized for its quality and reliability in an ever-increasing number of markets worldwide. So far EBASEE products have gained many international approvals, such as **TUV, KEMA, CB, SEMKO, RoHS, CE, and CCC** etc.

With quality raw materials and components supply, all products are manufactured to EBASEE's defined specifications. We have 4 semi-auto production lines, up to date quality control facilities, and well-trained skillful workers. Moreover, with a technical R & D team and fully equipped in-house laboratory, EBASEE factory can carry out efficient new products developing and daily production QC as well.

EBASEE have wide range cooperations with world leading companies in new products developing or OEM, ODM cooperation. Meanwhile we also process industry cooperation on intelligent home products, and work with some university such as Xi'an Jiao Tong University on project solutions. EBASEE is focused on achieving growth through the growth and success of its worldwide partners.

EBASEE, guided by the "market-oriented" philosophy, powered with the "Quick response and flexible supply" capability, can support our worldwide partners to compete against established global players to deliver the most comprehensive and cost-effective products and service in the market.

"Smart life, Green EBASEE"



Enterprise credit



EBS1TR

Thermal Relay



Function

EBS1TR Series overload relays apply to circuit of AC 50Hz or 60Hz, rated voltage to below 660V and rated current 0.1A-93A for AC motor overload and single phase protection during long time or intermittent long time service, which can also protect three phase serious imbalance and long starting time of motor or long time operation, can also be used for corresponding AC contactor for electromagnetic starter.

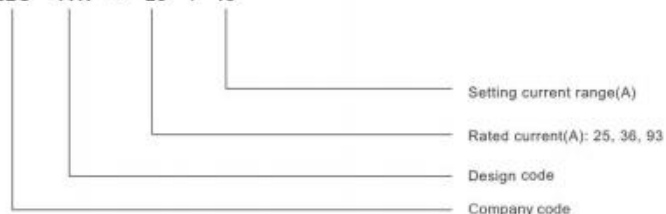
This product has innovative, elegant model and small installation area, functions such as temperature compensation, action indication, automatic and manual reset, stop with steady and reliable performance

Thermal relay can be combined/connected with contactor or installed separately.

Standard: IEC 60947-4-1

Nomenclature

EBS 1TR - 25 / 18



Structural Features

- 3-phase bimetal type
- With overload and open-phase protection
- With setting current continuous adjustable apparatus
- With temperature compensation
- With action indication
- With testing mechanism
- With stop button
- With manual and automatic reset button
- With electrically separable normal open and normal closed contacts
- Installation method: plug installation with contactor or independent installation

Ambient temperature: The upper limit shall not exceed +40°C; the average value within 24 hours shall not exceed +35°C; the lower limit shall be not less than -5°C.

Atmosphere conditions: Relative humidity shall not exceed 50% when the ambient temperature is +40°C. Higher relative humidity is permissible at lower temperature, for example, it can reach 90% at 20°C. Special measures should be taken to address the dew occurred occasionally due to temperature changes.

Altitude: Installation altitude shall not exceed 2000m.

Anti-pollution degree: III.

Installation category: III.

Installation conditions: Install at proper working position, start of contactor mounting surface shall not exceed ±5°. Thermal relay shall be installed in places with no obvious shake or shock.

Environmental protection: Sufficient consideration of environmental protection factors has been taken in design process by adopting retrievable and naturally degradable materials in components.

Technical Data

Type		EBS1TR-25	EBS1TR-36	EBS1TR-93
Standard		IEC60947-4-1	IEC60947-4-1	IEC60947-4-1
Rated working current (Ie)	A	25	36	93
Rated insulating voltage (Ui)	V	660	660	660
Phase failure protection function		√	√	√
Automatic & manual reset		√	√	√
Temperature compensation		√	√	√
Releasing indicator		√	√	√
Test & stop pushbutton		√	√	√
Auxiliary contacts				
Rated current	AC-15 230V	A	2.73	2.73
	AC-15 380V	A	1.58	1.58
	DC-13 230V	A	0.2	0.2
Ambient air temperature		℃	-5→40	-5→40
Altitude	max. meter	2000	2000	2000
Pollution grade			3	3
Installation category			3	3
Mounting type	Independent		√	√
	Plug-in		√	√

Action Characteristics

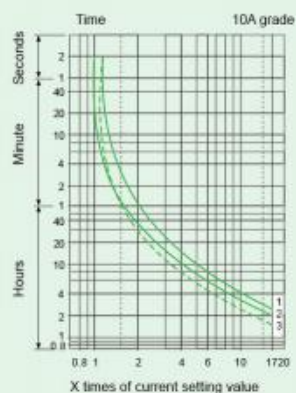
Overload protection

Item No.	Setting current multiple	Action time	Start condition	Ambient air temperature(°C)
1	1.05	≥2h	Cold state start	20 ± 5
2	1.2	<2h	After test item 1	
3	1.5	<2min	After test item 1	
4	7.2	2s<Tp ≤10s	Cold state start	

Phase failure protection

Item No.	Setting current multiple		Action time	Start condition	Ambient air temperature(°C)
	Any two phase	The third phase			
5	1.0	0.9	≥2h	Cold state start	20 ± 5
6	1.15	0	<2h	After test item 5	

Tripping Curve



1. Equilibrium running, 3 phase, start from cold state
2. Equilibrium running, 2 phase, start from cold state
3. Equilibrium running, 3 phase, after long period of setting current (hot state)

Rated working current(A)	Setting range (A)	Matched fuse type		Matched AC contactor	Type code
		aM(A)	gG(A)		
25	0.1-0.16	0.25	2	EBS1C-09	1TR 25/0.16
	0.16-0.25	0.25	2	EBS1C-09	1TR 25/0.25
	0.25-0.4	1	2	EBS1C-09	1TR 25/0.40
	0.4-0.63	1	2	EBS1C-09	1TR 25/0.63
	0.63-1	2	4	EBS1C-09	1TR 25/1
	1-1.6	2	4	EBS1C-09	1TR 25/1.6
	1.25-2	4	6	EBS1C-09	1TR 25/2
	1.6-2.5	4	6	EBS1C-09	1TR 25/2.5
	2.5-4	6	10	EBS1C-09	1TR 25/4
	4-6	8	16	EBS1C-09	1TR 25/6
	5.5-8	12	20	EBS1C-09	1TR 25/8
	7-10	12	20	EBS1C-12	1TR 25/10
	9-13	16	25	EBS1C-12	1TR 25/13
	12-18	20	35	EBS1C-18	1TR 25/18
	17-25	25	50	EBS1C-25	1TR 25/25
36	23-32	40	63	EBS1C-32	1TR 36/32
	29-36	40	80	EBS1C-32	1TR 36/36
93	23-32	40	63	EBS1C-40	1TR 93/32
	30-40	40	100	EBS1C-40	1TR 93/40
	37-50	63	100	EBS1C-50	1TR 93/50
	48-65	63	100	EBS1C-65	1TR 93/65
	55-70	80	125	EBS1C-80	1TR 93/70
	63-80	80	125	EBS1C-80	1TR 93/80
	80-93	100	160	EBS1C-95	1TR 93/93

Order Note

Following information needed be marked when order

Product name and model
Rated current
Setting current range

Ordering sample

To order EBS1TR thermal relay, rated current is 25A, setting current range is 18A, quantity is 1000 pieces, should be marked:
Thermal relay EBS1TR-25/18 1000pcs

Outline and Installation Dimensions.

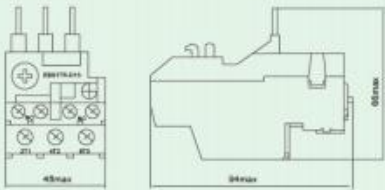


Fig 1: EBS1TR-D13/Z outline dimension diagram

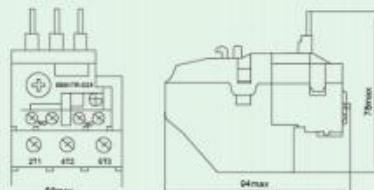


Fig 2: EBS1TR-D23/Z outline dimension diagram

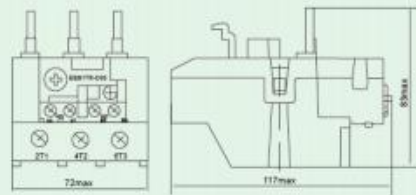


Fig 3: EBS1TR-D33/Z outline dimension diagram

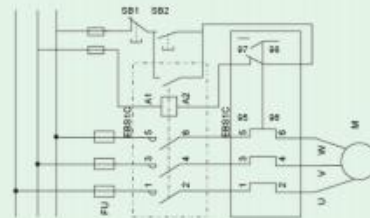


Fig 4: operating principle diagram of thermal overload relay

FU-fuse EBS1C AC contactor
 EBS1TR-thermal relay
 SB1- stop button SB2-start button

Installation Frame

EBS1C-A7

Matched	Type code
1TR 25	1C A7D1064
1TR 36	1C A7D2064
1TR 93	1C A7D3064

