Data sheet: Short Circuit Proof Safety Isolating Transformers Type VB

Description: Safety isolating transformer costructed and tested according to

VDE 0570/EN 61 558, UL 506, CSA 22.2

Approvals: According to table

Test voltage PRI - SEC 5000 V, 50 Hz

SEC - SEC 250 V, 50 Hz

Short-circuit protection: Inherently short-circuit proof

Construction: Open design, potted in insulation housing

Safety class: Prepared for class II equipment

Protection index: Connections IP 00

Housing IP 65

Max ambient temperature: According to table

Insulation class of the

insulation system: VDE (B= 130°C); UL+CSA Class 105 (A=105°C)

Input voltage: 230 V

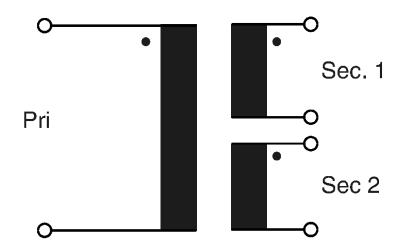
Frequency: 50 - 60 Hz

Output voltage: According to table

Connections: Soldering pins for printed circuit board mounting

Packing: Separately packed in cartons

Schematic plan:



Description:

These VB type resin moulded safety isolating transformers, are inherently short-circuit proof so do not require external protection. The dual output can be connected in series or parallel.

Note:

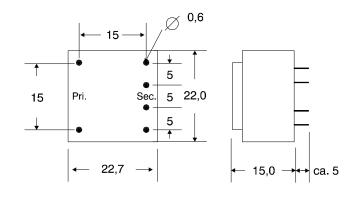
- * vacuum epoxy resin moulded (selfextinguishing to UL 94 V0)
- * 100% tested
- * Two chamber bobbin construction

Output power 0,35 VA Core-type EI 20/6,1

Height 15,0 mm Weight 24g

Ground area 22 mm x 22,7 mm

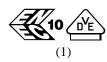
Type	voltage V	A	Approvals
VB 0,35/2/6		2x0,029	1,2
VB 0,35/2/8	2x8	2x0,021	1,2
VB 0,35/2/9	2x9	2x0,019	1,2
VB 0,35/2/12		,	1,2
VB 0,35/2/15*	2x15	2x0,011	2
VB 0,35/2/18*			2
VB 0,35/2/24*	2x24	2x0,007	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6

* = according to VDE 0570/EN 61558-2-1

No load output voltage x Faktor = typ. 1,8 Core Losses typ. 1,8 W Efficiency typ. 30 % Ambient Temperature (ta) $+70^{\circ}$ C

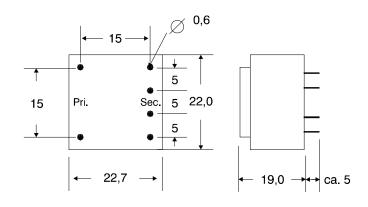




Height 19,0 mm Weight 35g Ground area 22 mm x 22,7 mm

Type	SEC rate voltage V	ed output- current A	Approvals
VB 0,5/2/6	2x6	2x0,041	1,2
VB 0,5/2/8	2x8	2x0,031	1,2
VB 0,5/2/9	2x9	2x0,027	1,2
VB 0,5/2/12	2x12	2x0,020	1,2
VB 0,5/2/15*	2x15	2x0,016	2

.....



According to VDE 0570/EN 61558-1 with EN 61558-2-6

2x0,013

2x0,010

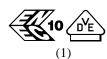
2x24

VB 0,5/2/18* 2x18

VB 0,5/2/24*

No load output voltage x Faktor = typ. 1,8Core Losses typ. 1,65 WEfficiency typ. 40 %Ambient Temperature (ta) $+70 ^{\circ}C$

Approvals



2

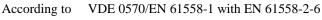


^{* =} according to VDE 0570/EN 61558-2-1

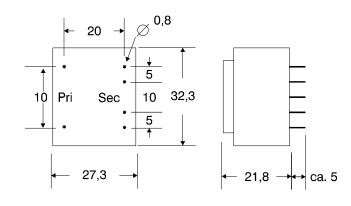
Height 21,8 mm Weight 72g Ground area 32,3 mm x 27,3 mm

Type	SEC rated output-

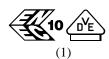
Type	SEC rate voltage V	ed output- current A	Approvals
VB 1,0/2/6	2x6	2x0,083	1,2
,		2x0,062	1,2
•	2x9	2x0,055	1,2
VB 1,0/2/12	2x12		1,2
VB 1,0/2/15	2x15	2x0,033	1,2
VB 1,0/2/18*			2
VB 1,0/2/24*			2



^{* =} according to VDE 0570/EN 61558-2-1



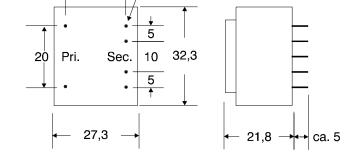
No load output voltage x Faktor = typ. 1,32Core Losses typ. 0,9 WEfficiency typ. 55 %Ambient Temperature (ta) $+70 ^{\circ}C$





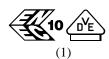
Height 23,8 mm Weight 84g Ground area 32,3 mm x 27,3 mm

Туре	voltage V	A	Approvals
VB 1,2/2/6	2x6	2x0,10	1,2
•	2x8	2x0,075	1,2
,	2x9	2x0,066	1,2
VB 1,2/2/12	2x12	2x0,050	1,2
VB 1,2/2/15			1,2
VB 1,2/2/18*	2x18	2x0,033	2
VB 1,2/2/24*	2x24	2x0,025	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6

No load output voltage x Faktor = typ. 1,31Core Losses typ. 1,0 WEfficiency typ. 57 %Ambient Temperature (ta) $+70 ^{\circ}C$

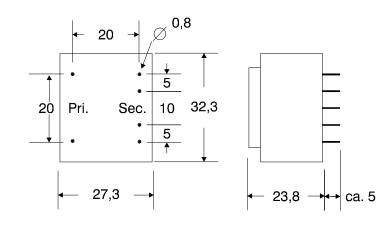




^{* =} according to VDE 0570/EN 61558-2-1

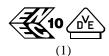
Height 23,8 mm Weight 84g Ground area 32,3 mm x 27,3 mm

Туре	voltage	ed output- current A	Approvals
VB 1,5/2/6		2x0,125	1,2
VB 1,5/2/8		2x0,093	1,2
VB 1,5/2/9	2x9	2x0,083	1,2
VB 1,5/2/12	2x12	2x0,062	1,2
VB 1,5/2/15		2x0,050	1,2
VB 1,5/2/18*			2
VB 1,5/2/24*	2x24	2x0,031	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6

No load output voltage x Faktor = typ. 1,39Core Losses typ. 1,0 WEfficiency typ. 57 %Ambient Temperature (ta) $+70 ^{\circ}C$



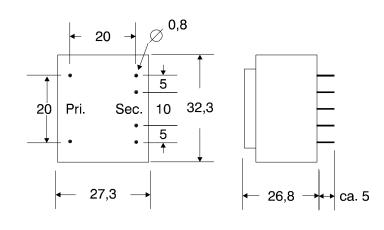


^{* =} according to VDE 0570/EN 61558-2-1

Height 26,8 mm Weight 100g Ground area 32,3 mm x 27,3 mm

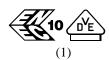
Type	SEC rated output-

Туре	SEC rate voltage V	ed output- current A	Approvals
VB 2,0/2/6	2x6	2x0,166	1,2
VB 2,0/2/8		2x0,125	1,2
VB 2,0/2/9		2x0,111	1,2
VB 2,0/2/12	2x12	2x0,083	1,2
VB 2,0/2/15	2x15	2x0,066	1,2
VB 2,0/2/18*	2x18	2x0,055	2
VB 2,0/2/24*	2x24	2x0,041	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6

No load output voltage x Faktor = typ. 1,64Core Losses typ. 1,10 W Efficiency typ. 52 % Ambient Temperature (ta) +70°C



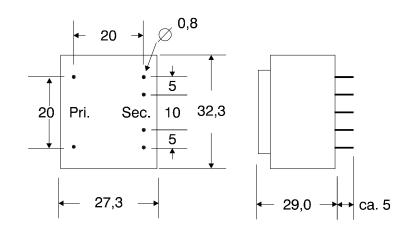


^{* =} according to VDE 0570/EN 61558-2-1

Height 29,0 mm Weight 110g Ground area 32,3 mm x 27,3 mm

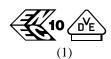
Type SEC rated output-

Type	SEC rated output-		
	voltage	current	
	V	A	Approvals
VB 2,3/2/6	2x6	2x0,191	1,2
VB 2,3/2/8	2x8	2x0,143	1,2
VB 2,3/2/9	2x9	2x0,127	1,2
VB 2,3/2/12	2x12	2x0,095	1,2
VB 2,3/2/15		2x0,076	1,2
VB 2,3/2/18*		2x0,063	2
VB 2,3/2/24*	2x24	2x0,047	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6

No load output voltage x Faktor = typ. 1,43Core Losses typ. 1,1 WEfficiency typ. 59 %Ambient Temperature (ta) $+70 ^{\circ}C$

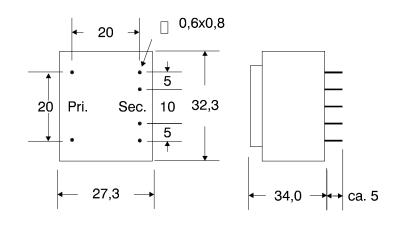




^{* =} according to VDE 0570/EN 61558-2-1

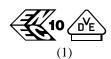
Height 34,0 mm Weight 139g Ground area 32,3 mm x 27,3 mm

Туре		ed output- current A	Approvals
VB 2,8/2/6	2x6	2x0,233	1,2
VB 2,8/2/8	2x8	2x0,175	1,2
VB 2,8/2/9	2x9	2x0,155	1,2
VB 2,8/2/12	2x12	2x0,116	1,2
VB 2,8/2/15		2x0,093	1,2
VB 2,8/2/18*	2x18	2x0,077	2
VB 2,8/2/24*	2x24	2x0,058	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6

No load output voltage x Faktor = typ. 1,31Core Losses typ. 0,9 WEfficiency typ. 57 %Ambient Temperature (ta) $+70 ^{\circ}C$



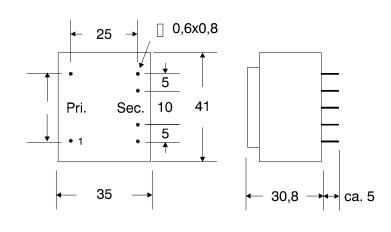


^{* =} according to VDE 0570/EN 61558-2-1

Height 30,8 mm Weight 173g Ground area 41,0 mm x 35,0 mm

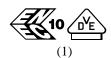
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Туре	SEC rate voltage V	ed output- current A	Approvals
,	2x6	2x0,266	1,2
VB 3,2/2/8	2x8	2x0,200	1,2
VB 3,2/2/9	2x9		1,2
VB 3,2/2/12		,	1,2
VB 3,2/2/15	2x15	2x0,106	1,2
VB 3,2/2/18*	2x18	2x0,088	2
VB 3,2/2/24*	2x24		2



According to VDE 0570/EN 61558-1 with EN 61558-2-6

No load output voltage x Faktor = typ. 1,57Core Losses typ. 0,8WEfficiency typ. 58 %Ambient Temperature (ta) $+50^{\circ}\text{C}$





^{* =} according to VDE 0570/EN 61558-2-1