

# Data sheet: Short Circuit Proof Safety Isolating Transformers Type VB

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Description ..... : Safety isolating transformer constructed 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

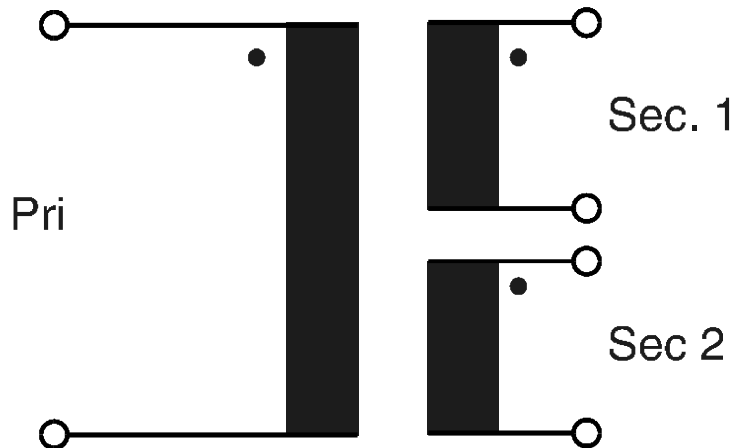
Frequency ..... : 50 - 60 Hz

Output voltage ..... : According to table

Connections ..... : Soldering pins for printed circuit board mounting

Packing ..... : Separately packed in cartons

Schematic plan :



Description :

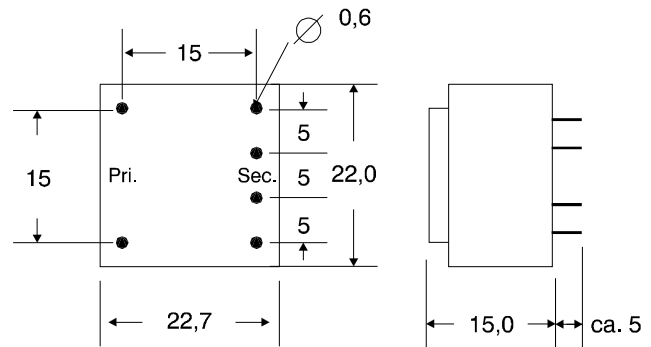
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 These VB type resin moulded safety isolating transformers, are inherently short-circuit proof so do not require external protection. The dual output can be connected in series or parallel.

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

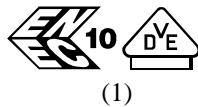
Type	SEC rated output-voltage V	current A	Approvals
VB 0,35/2/6	2x6	2x0,029	1,2
VB 0,35/2/8	2x8	2x0,021	1,2
VB 0,35/2/9	2x9	2x0,019	1,2
VB 0,35/2/12	2x12	2x0,014	1,2
VB 0,35/2/15*	2x15	2x0,011	2
VB 0,35/2/18*	2x18	2x0,009	2
VB 0,35/2/24*	2x24	2x0,007	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6  
 \* = according to VDE 0570/EN 61558-2-1

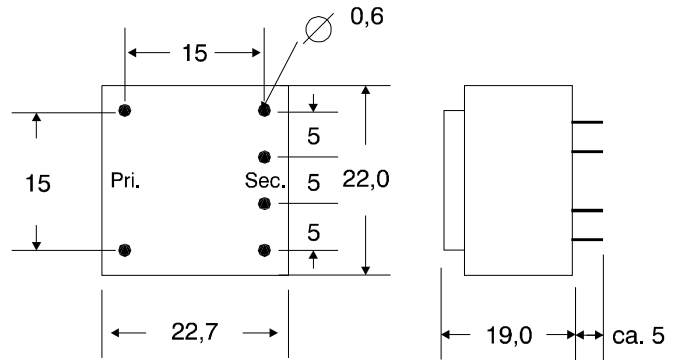
No load output voltage x Faktor = typ. 1,8  
 Core Losses typ. 1,8 W  
 Efficiency typ. 30 %  
 Ambient Temperature (ta) +70°C

Approvals



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

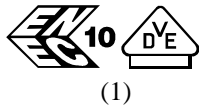
Type	SEC rated output-		Approvals
	voltage V	current A	
VB 0,5/2/6	2x6	2x0,041	1,2
VB 0,5/2/8	2x8	2x0,031	1,2
VB 0,5/2/9	2x9	2x0,027	1,2
VB 0,5/2/12	2x12	2x0,020	1,2
VB 0,5/2/15*	2x15	2x0,016	2
VB 0,5/2/18*	2x18	2x0,013	2
VB 0,5/2/24*	2x24	2x0,010	2



According to VDE 0570/EN 61558-1 with EN 61558-2-6  
 \* = according to VDE 0570/EN 61558-2-1

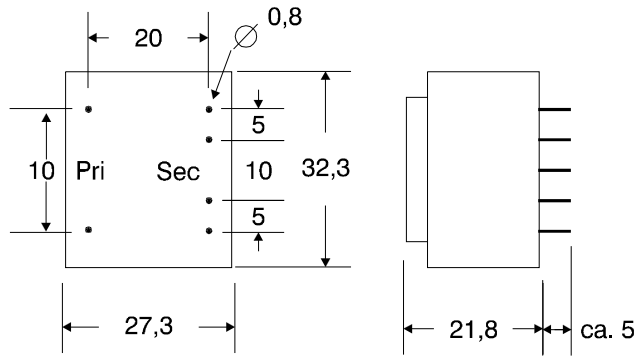
No load output voltage x Faktor = typ. 1,8  
 Core Losses typ. 1,65 W  
 Efficiency typ. 40 %  
 Ambient Temperature (ta) +70°C

Approvals



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

Type	SEC rated output-		Approvals
	voltage V	current A	
VB 1,0/2/6	2x6	2x0,083	1,2
VB 1,0/2/8	2x8	2x0,062	1,2
VB 1,0/2/9	2x9	2x0,055	1,2
VB 1,0/2/12	2x12	2x0,041	1,2
VB 1,0/2/15	2x15	2x0,033	1,2
VB 1,0/2/18*	2x18	2x0,027	2
VB 1,0/2/24*	2x24	2x0,020	2

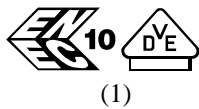


According to VDE 0570/EN 61558-1 with EN 61558-2-6

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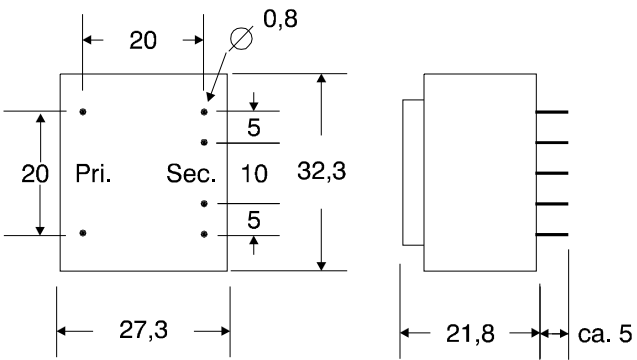
No load output voltage x Faktor = typ. 1,32  
 Core Losses                      typ. 0,9 W  
 Efficiency                        typ. 55 %  
 Ambient Temperature (ta)      +70°C

Approvals



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

Type	SEC rated output-		Approvals
	voltage V	current A	
VB 1,2/2/6	2x6	2x0,10	1,2
VB 1,2/2/8	2x8	2x0,075	1,2
VB 1,2/2/9	2x9	2x0,066	1,2
VB 1,2/2/12	2x12	2x0,050	1,2
VB 1,2/2/15	2x15	2x0,040	1,2
VB 1,2/2/18*	2x18	2x0,033	2
VB 1,2/2/24*	2x24	2x0,025	2



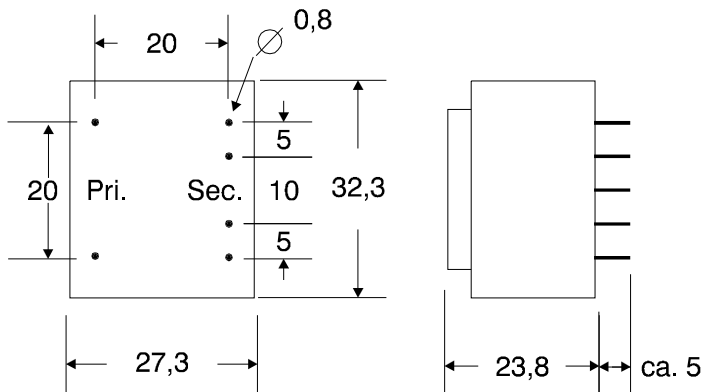
According to VDE 0570/EN 61558-1 with EN 61558-2-6  
 \* = according to VDE 0570/EN 61558-2-1

No load output voltage x Faktor = typ. 1,31  
 Core Losses                      typ. 1,0 W  
 Efficiency                        typ. 57 %  
 Ambient Temperature (ta)    +70°C



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

Type	SEC rated output-		Approvals
	voltage V	current A	
VB 1,5/2/6	2x6	2x0,125	1,2
VB 1,5/2/8	2x8	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	2x15	2x0,050	1,2
VB 1,5/2/18*	2x18	2x0,041	2
VB 1,5/2/24*	2x24	2x0,031	2

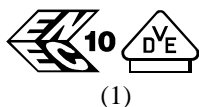


According to VDE 0570/EN 61558-1 with EN 61558-2-6

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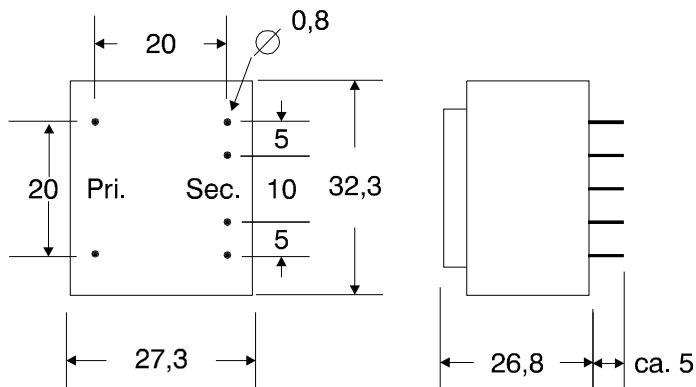
No load output voltage x Faktor = typ. 1,39  
 Core Losses                           typ. 1,0 W  
 Efficiency                               typ. 57 %  
 Ambient Temperature (ta)       +70°C

Approvals



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

Type	SEC rated output-		Approvals
	voltage V	current A	
VB 2,0/2/6	2x6	2x0,166	1,2
VB 2,0/2/8	2x8	2x0,125	1,2
VB 2,0/2/9	2x9	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

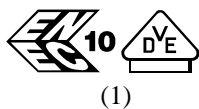


According to VDE 0570/EN 61558-1 with EN 61558-2-6

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

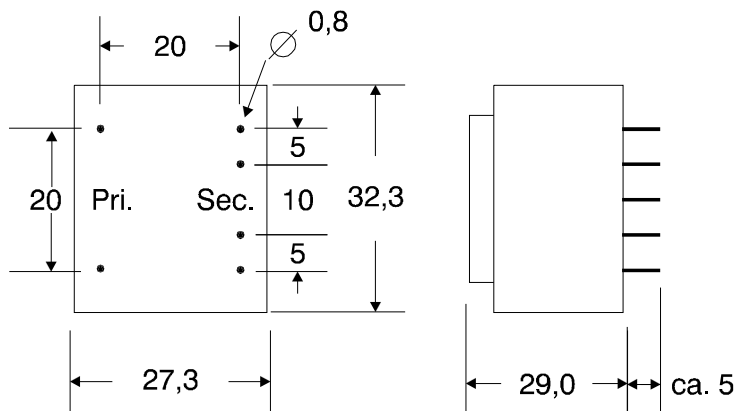
No load output voltage x Faktor = typ. 1,64  
 Core Losses                           typ. 1,10 W  
 Efficiency                               typ. 52 %  
 Ambient Temperature (ta)       +70°C

Approvals



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

Type	SEC rated output-		Approvals
	voltage V	current A	
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	2x15	2x0,076	1,2
VB 2,3/2/18*	2x18	2x0,063	2
VB 2,3/2/24*	2x24	2x0,047	2

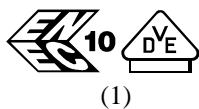


According to VDE 0570/EN 61558-1 with EN 61558-2-6

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

No load output voltage x Faktor = typ. 1,43  
 Core Losses                              typ. 1,1 W  
 Efficiency                                  typ. 59 %  
 Ambient Temperature (ta)            +70°C

Approvals

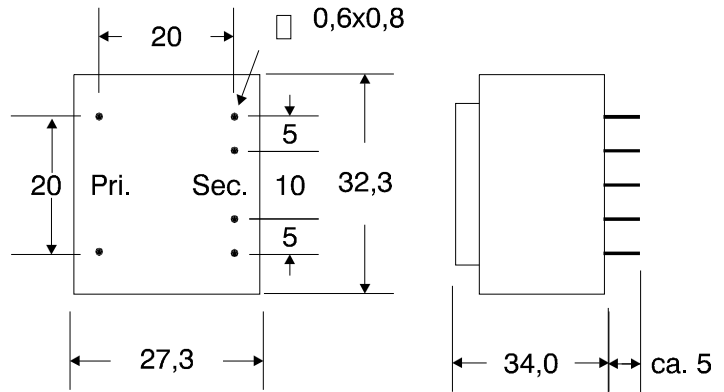




Height 34,0 mm      Weight 139g

Ground area 32,3 mm x 27,3 mm

Type	SEC rated output-		Approvals
	voltage V	current A	
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	2x15	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

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

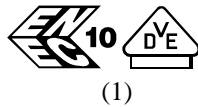
No load output voltage x Faktor = typ. 1,31

Core Losses                              typ. 0,9 W

Efficiency                                    typ. 57 %

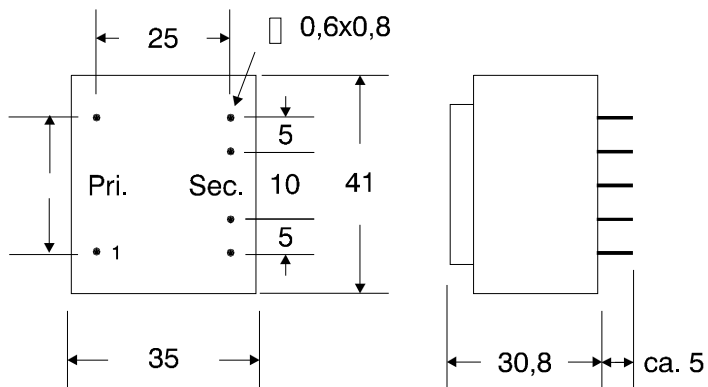
Ambient Temperature (ta)              +70°C

Approvals



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

Type	SEC rated output-		Approvals
	voltage V	current A	
VB 3,2/2/6	2x6	2x0,266	1,2
VB 3,2/2/8	2x8	2x0,200	1,2
VB 3,2/2/9	2x9	2x0,177	1,2
VB 3,2/2/12	2x12	2x0,133	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	2x0,066	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. 1,57  
Core Losses                            typ. 0,8W  
Efficiency                                typ. 58 %  
Ambient Temperature (ta)            +50°C

Approvals

