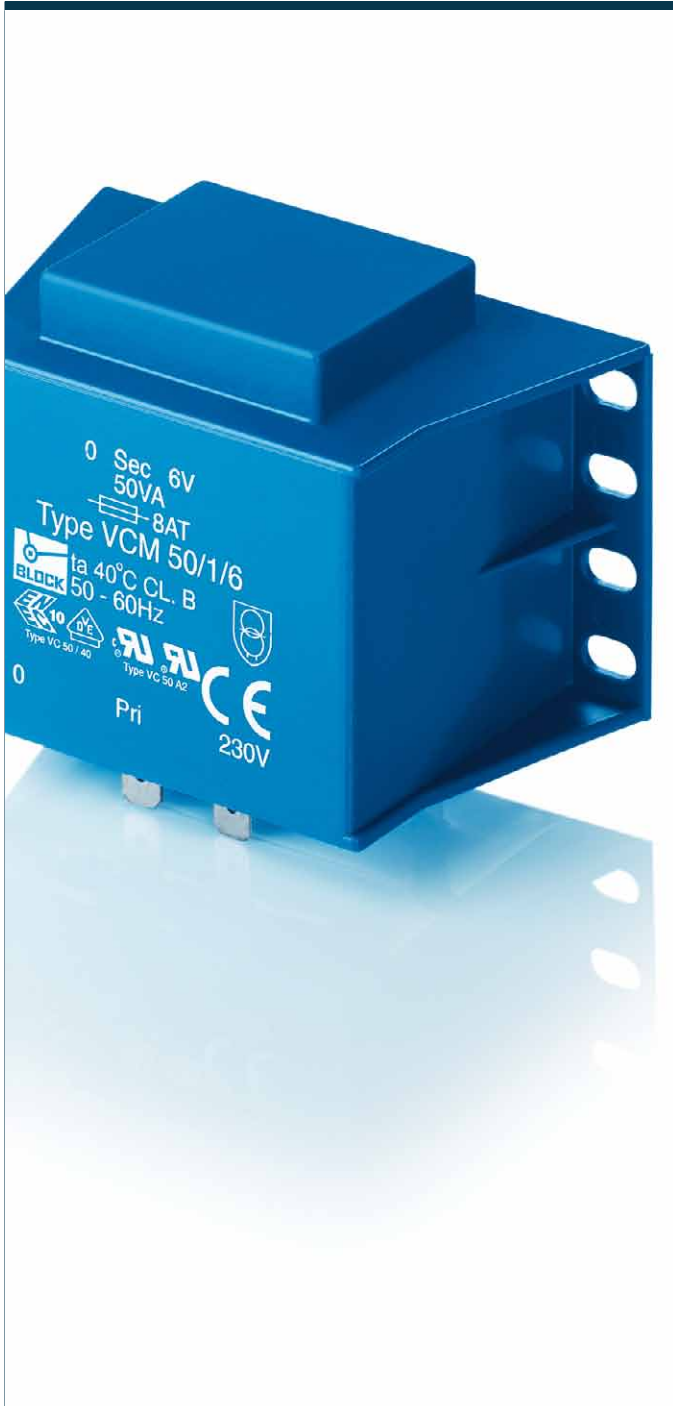


PCB transformer, mountable **VCM**



General Data

Rated input voltage 230 Vac
Rated output voltage 6 - 2 x 24 Vac
Rated power 5 - 50 VA
Insulation class B
Maximum ambient temperature 40 - 50 °C
Efficiency up to 87 %
Degree of protection IP 00

Advantages

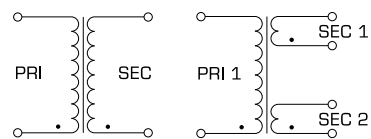
Minimum size at high output
Also with double output voltage for series or parallel connection
Permanent corrosion protection, high insulation value and maximum electrical reliability thanks to XtraDensifiFill resin encapsulation
Coil shell in 2-chamber technology
Self-extinguishing potting material
Additional mounting option with tabs on the housing

Applications

As a safety isolating transformer for the safe electrical isolation of the input and output sides.

As a safety isolating transformer for the safe electrical isolation of the input and output sides. The transformer is suitable for creating SELV and PELV circuits because of the limit on the output voltage.

Circuit Diagram



Standards



Mains transformer
to: VDE 0570 Teil 2-1, DIN EN 61558-2-1, EN 61558-2-1, IEC 61558-2-1, UL 5085-1/-2, CSA 22.2 No.66

Safety isolating transformer
to: VDE 0570 Teil 2-6, DIN EN 61558-2-6, EN 61558-2-6, IEC 61558-2-6, UL 5085-1/-2, CSA 22.2 No.66

Certifications



ENEC 10 (VDE), UL 5085-1/-2, CSA 22.2 No.66



PCB transformer, mountable **VCM**

Type	VCM 5,0/1/..	VCM 5,0/2/..	VCM 10/1/..	VCM 10/2/..	VCM 16/1/..	VCM 16/2/..
Electrical data						
Input						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Rated frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output						
Rated output voltage: Order no.	6 Vac: VCM 5,0/1/6 8 Vac: VCM 5,0/1/8 9 Vac: VCM 5,0/1/9 12 Vac: VCM 5,0/1/12 15 Vac: VCM 5,0/1/15 18 Vac: VCM 5,0/1/18 24 Vac: VCM 5,0/1/24	2x6 Vac: VCM 5,0/2/6 2x8 Vac: VCM 5,0/2/8 2x9 Vac: VCM 5,0/2/9 2x12 Vac: VCM 5,0/2/12 2x15 Vac: VCM 5,0/2/15 2x18 Vac: VCM 5,0/2/18 2x24 Vac: VCM 5,0/2/24*	6 Vac: VCM 10/1/6 8 Vac: VCM 10/1/8 9 Vac: VCM 10/1/9 12 Vac: VCM 10/1/12 15 Vac: VCM 10/1/15 18 Vac: VCM 10/1/18 24 Vac: VCM 10/1/24	2x6 Vac: VCM 10/2/6 2x8 Vac: VCM 10/2/8 2x9 Vac: VCM 10/2/9 2x12 Vac: VCM 10/2/12 2x15 Vac: VCM 10/2/15 2x18 Vac: VCM 10/2/18 2x24 Vac: VCM 10/2/24*	6 Vac: VCM 16/1/6 8 Vac: VCM 16/1/8 9 Vac: VCM 16/1/9 12 Vac: VCM 16/1/12 15 Vac: VCM 16/1/15 18 Vac: VCM 16/1/18 24 Vac: VCM 16/1/24	2x6 Vac: VCM 16/2/6 2x8 Vac: VCM 16/2/8 2x9 Vac: VCM 16/2/9 2x12 Vac: VCM 16/2/12 2x15 Vac: VCM 16/2/15 2x18 Vac: VCM 16/2/18 2x24 Vac: VCM 16/2/24*
Rated Power	5.0 VA	5.0 VA	10.0 VA	10.0 VA	16.0 VA	16.0 VA
No-load voltage (app. x factor)	1.25	1.25	1.25	1.25	1.24	1.24
No-load loss (typ.)	1.50 W	1.50 W	1.60 W	1.60 W	1.80 W	1.80 W
Efficiency	68 %	68 %	74 %	74 %	76 %	76 %
Standards						
Classification	Safety isolating transformer	Safety isolating transformer *Mains transformer (without VDE mark)	Safety isolating transformer	Safety isolating transformer *Mains transformer (without VDE mark)	Safety isolating transformer	Safety isolating transformer *Mains transformer (without VDE mark)
Approvals						
Approvals	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)
Environment						
Ambient temperature max.	50 °C	50 °C	40 °C	40 °C	40 °C	40 °C
Safety and protection						
Type	encapsulated	encapsulated	encapsulated	encapsulated	encapsulated	encapsulated
Class of Insulation System	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	II	II	II	II	II	II
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Order numbers						
Order Number	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage

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PCB transformer, mountable VCM

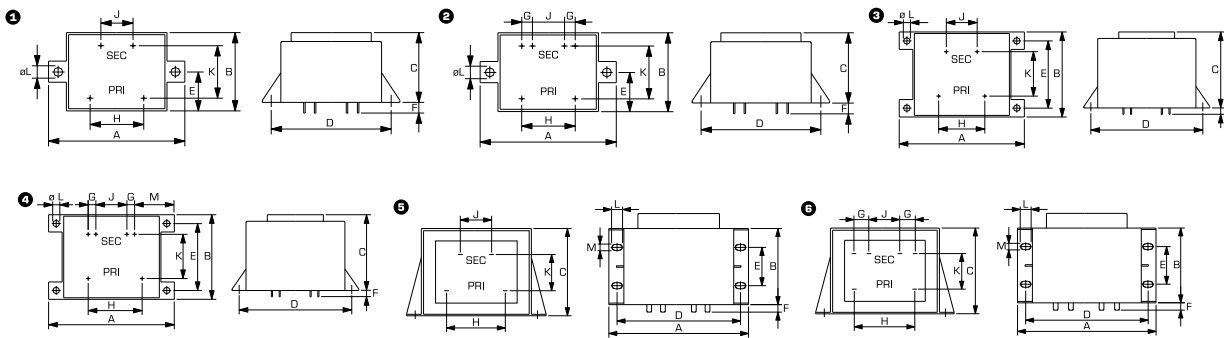
Type	VCM 25/1/..	VCM 25/2/..	VCM 36/1/..	VCM 36/2/..	VCM 50/1/..	VCM 50/2/..
Electrical data						
Input						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Rated frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output						
Rated output voltage: Order no.	6 Vac: VCM 25/1/6 8 Vac: VCM 25/1/8 9 Vac: VCM 25/1/9 12 Vac: VCM 25/1/12 15 Vac: VCM 25/1/15 18 Vac: VCM 25/1/18 24 Vac: VCM 25/1/24	2x6 Vac: VCM 25/2/6 2x8 Vac: VCM 25/2/8 2x9 Vac: VCM 25/2/9 2x12 Vac: VCM 25/2/12 2x15 Vac: VCM 25/2/15 2x18 Vac: VCM 25/2/18 2x24 Vac: VCM 25/2/24*	6 Vac: VCM 36/1/6 8 Vac: VCM 36/1/8 9 Vac: VCM 36/1/9 12 Vac: VCM 36/1/12 15 Vac: VCM 36/1/15 18 Vac: VCM 36/1/18 24 Vac: VCM 36/1/24	2x6 Vac: VCM 36/2/6 2x8 Vac: VCM 36/2/8 2x9 Vac: VCM 36/2/9 2x12 Vac: VCM 36/2/12 2x15 Vac: VCM 36/2/15 2x18 Vac: VCM 36/2/18 2x24 Vac: VCM 36/2/24**	6 Vac: VCM 50/1/6 8 Vac: VCM 50/1/8 9 Vac: VCM 50/1/9 12 Vac: VCM 50/1/12 15 Vac: VCM 50/1/15 18 Vac: VCM 50/1/18 24 Vac: VCM 50/1/24	2x6 Vac: VCM 50/2/6 2x8 Vac: VCM 50/2/8 2x9 Vac: VCM 50/2/9 2x12 Vac: VCM 50/2/12 2x15 Vac: VCM 50/2/15 2x18 Vac: VCM 50/2/18 2x24 Vac: VCM 50/2/24**
Rated Power	25.0 VA	25.0 VA	36.0 VA	36.0 VA	50.0 VA	50.0 VA
No-load voltage (app. x factor)	1.12	1.12	1.11	1.11	1.09	1.09
No-load loss (typ.)	2.50 W	2.50 W	2.60 W	2.60 W	3.80 W	3.80 W
Efficiency	82 %	82 %	83 %	83 %	87 %	87 %
Standards						
Classification	Safety isolating transformer	Safety isolating transformer *Mains transformer (without VDE mark)	Safety isolating transformer	Safety isolating transformer **isolating transformer (without VDE mark)	Safety isolating transformer	Safety isolating transformer **isolating transformer (without VDE mark)
Approvals						
Approvals	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)	cURus, ENEC (VDE)
Environment						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
Safety and protection						
Type	encapsulated	encapsulated	encapsulated	encapsulated	encapsulated	encapsulated
Class of Insulation System	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105	VDE=B, UL=class 105
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	II	II	II	II	II	II
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Order numbers						
Order Number	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage	refer to rated output voltage



PCB transformer, mountable
VCM

Typ	Fixing method	Terminals	Pin (ø)	Core type	Weight	Dimension picture (in mm)													
						A	B	C	D	E	F	G	H	J	K	L	M		
VCM 5,0/1/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 42/14,8	0.19 kg	1	64	37	32.3	55	18.5	5	-	25	15	25	4.2	-	
VCM 5,0/2/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 42/14,8	0.19 kg	2	64	37	32.3	55	18.5	5	5	25	15	25	4.2	-	
VCM 10/1/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 48/16,8	0.28 kg	1	69	42.2	34.6	60	21.1	5	-	25	15	27.5	4.2	-	
VCM 10/2/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 48/16,8	0.28 kg	2	69	42.2	34.6	60	21.1	5	5	25	15	27.5	4.2	-	
VCM 16/1/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 54/18,8	0.42 kg	3	75.2	47.1	39	65	37.5	5	-	30	20	30	4.2	-	
VCM 16/2/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 54/18,8	0.42 kg	4	75.2	47.1	39	65	37.5	5	5	30	20	30	4.2	23.3	
VCM 25/1/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 60/25,5	0.61 kg	3	81.2	55	49.2	72.5	43.5	6.5	-	30	20	32.5	4.2	-	
VCM 25/2/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 60/25,5	0.61 kg	4	81.2	55	49.2	72.5	43.5	6.5	5	30	20	32.5	4.2	26	
VCM 36/1/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 66/23,0	0.75 kg	3	87.2	60	48.5	77.5	47.5	5	-	35	25	35	4.2	-	
VCM 36/2/..	Fixing points on the case	Pins for pcb	0.8 mm	EI 66/23,0	0.75 kg	4	87.2	61	48.5	77.5	47.5	5	5	35	20	35	4.2	31	
VCM 50/1/..	Fixing points on the case	Quick connect terminals	PRI 4.8 x 0.8 mm, SEC 6.3 x 0.8 mm	EI 66/34,5	0.99 kg	5	94	61	58.5	82	37.5	9	-	35	15	35	8.3	4.8	
VCM 50/2/..	Fixing points on the case	Quick connect terminals	PRI 4.8 x 0.8 mm, SEC 6.3 x 0.8 mm	EI 66/34,5	0.99 kg	6	94	61	58.5	82	37.5	9	10	35	15	35	8.3	4.8	

Dimension pictures



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