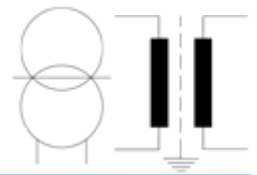




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Three-phase isolating transformers for photovoltaic and wind-power systems



BTTFV SERIES VERY LOW LOSSES THREE PHASE "GREEN ENERGY" TRANSFORMERS

DRY TYPE THREE PHASES TRANSFORMERS

Rated frequency: 50/60Hz

Rated primary voltage: 400V

Rated secondary voltage: **400V**

Group: YNyn0 (other groups are available under specific request)

Electrostatic screening between the primary and secondary windings

Cooling: Natural air

Design environment temperature: 45°C

Temperature/materials class: F (B or different under request)

Short circuit voltage: <5%

Service: continuous

HIGH EFFICIENCY EXECUTION WITH VERY LOW POWER LOSSES

Windings materials: copper/aluminum

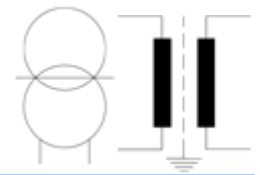
Design standards:

- UNI EN 61558-1 and 61558-2; EN 60076-11

- 202/95/CE (RoHs)

- UL Insulation System under request. File number E253717

PRODUCT NOT INTERESTED BY 204/108/CE NORM RELATED TO ELECTROMAGNETIC COMPATIBILITY EMISSIONS.



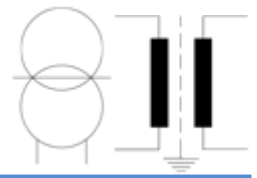
Three-phase isolating transformers for photovoltaic and wind-power systems

PART NUMBER	POWER [kVA]	IP00 EXECUTION				EFFICIENCY UNDER 100% OF LOAD			BOX EXECUTION (IP23-43) (*)			
		Height [mm]	Lenght [mm]	Deepness [mm]	Weight [kg]	Iron losses [W]	Copper losses [W]	Efficiency	Height H [mm]	Lenght B[mm]	Deepness Q[mm]	Weight [kg]
BTTTFV10	10	360	420	250	80	55	204	97,4	600	700	460	40
BTTTFV12	12	360	420	270	100	63	238	97,5				
BTTTFV15	15	410	480	300	125	80	294	97,5				
BTTTFV20	20	410	480	340	150	96	400	97,5				
BTTTFV25	25	410	480	360	170	141	458	97,6				
BTTTFV30	30	410	480	380	190	152	538	97,7				
BTTTFV35	35	470	540	330	210	161	648	97,7	800	900	650	70
BTTTFV40	40	480	580	350	220	180	706	97,8				
BTTTFV50	50	480	610	420	260	212	831	97,9				
BTTTFV60	60	550	610	420	290	236	1029	97,9				
BTTTFV70	70	550	610	430	310	275	1129	98,0				
BTTTFV80	80	550	610	440	320	296	1231	98,0				
BTTTFV90	90	580	640	440	360	331	1378	98,1	1000	1000	1000	100
BTTTFV100	100	580	660	460	400	356	1568	98,1				
BTTTFV110	110	580	690	460	420	395	1688	98,1				
BTTTFV120	120	650	690	460	460	421	1742	98,2				
BTTTFV130	130	650	700	460	480	455	1889	98,2				
BTTTFV150	150	680	750	460	520	488	2013	98,3				
BTTTFV200	200	680	750	550	610	541	2715	98,4	1200	1200	1200	140
BTTTFV250	250	700	750	630	730	639	3382	98,4				
BTTTFV300	300	820	850	630	850	783	3704	98,5				
BTTTFV400	400	820	890	650	1100	912	5012	98,5				
BTTTFV500	500	890	930	650	1300	1113	5831	98,6				

(*) Metallic box execution includes transformer installation into box and grounding of all metallic parts.



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Three-phase isolating transformers for photovoltaic and wind-power systems

BTTTFVS SERIES LOW LOSSES THREE PHASE TRANSFORMERS

DRY TYPE THREE PHASES TRANSFORMERS

Rated frequency: 50/60Hz

Rated primary voltage: 400V

Rated secondary voltage: 400V

Group: YNyn0 (other groups are available under specific request)

Cooling: Natural air

Design environment temperature: 35°C

Temperature/materials class: F (B or different under request)

Short circuit voltage: <6%

Service: continuous operation

HIGH EFFICIENCY EXECUTION WITH VERY LOW POWER LOSSES

Windings materials: copper/aluminum

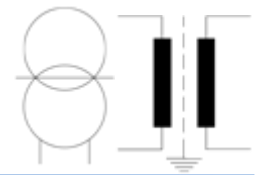
Design standards:

- UNI EN 61558-1 and 61558-2; EN 60076-11

- 202/95/CE (RoHs)

- UL Insulation System under request. File number E253717

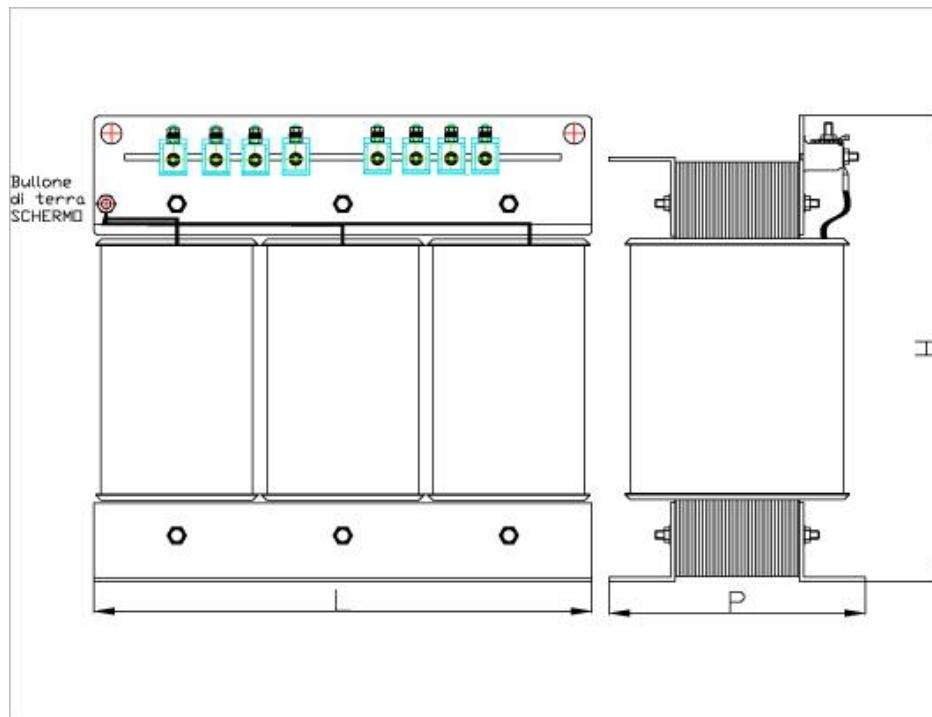
PRODUCT NOT INTERESTED BY 204/108/CE NORM RELATED TO ELECTROMAGNETIC COMPATIBILITY EMISSIONS.

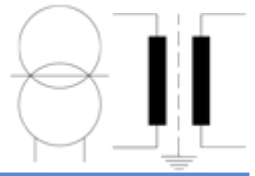


Three-phase isolating transformers for photovoltaic and wind-power systems

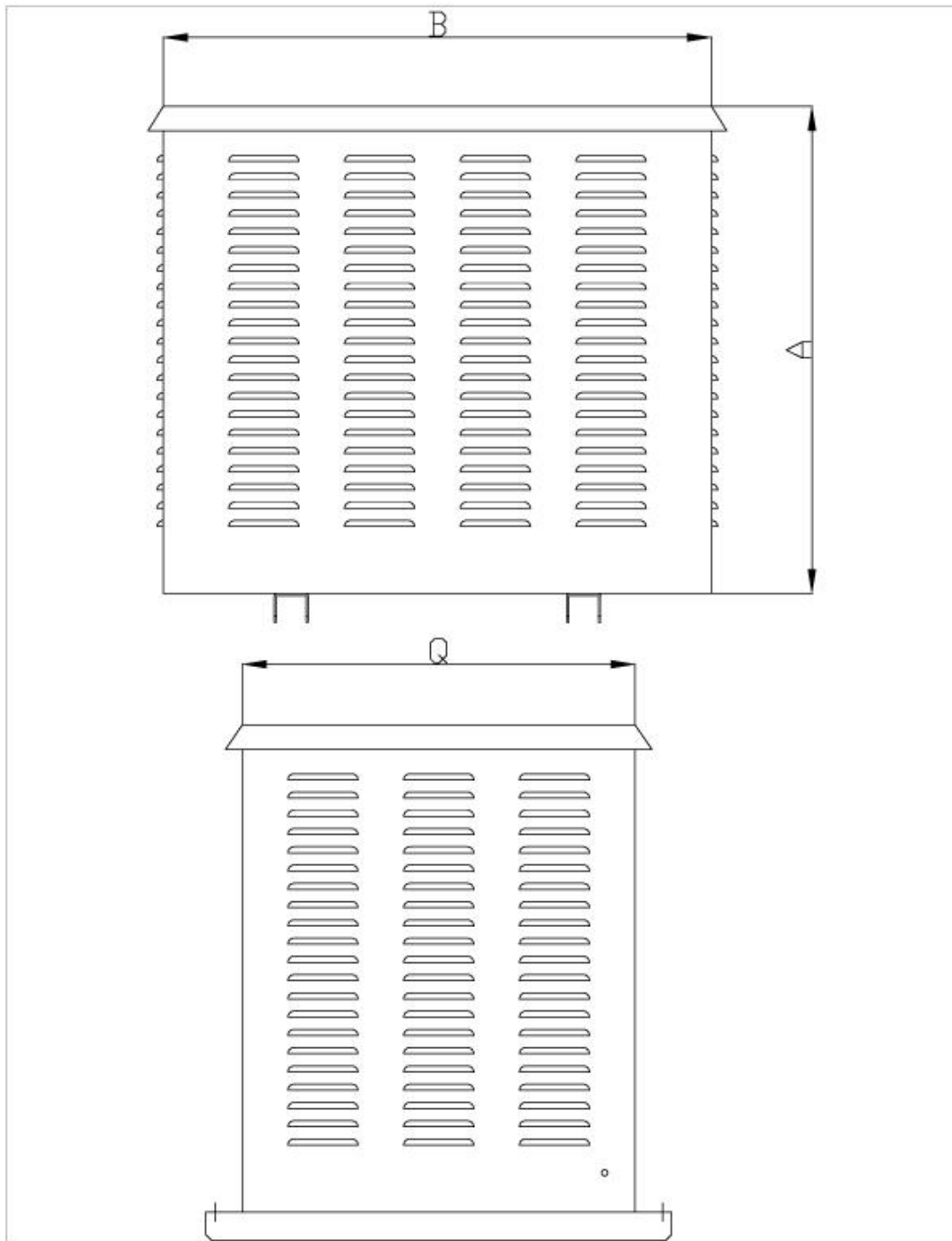
PART NUMBER	POWER [kVA]	IP00 EXECUTION			EFFICIENCY UNDER 100% OF LOAD				BOX EXECUTION (IP23-43) (*)			
		Height [mm]	Lenght [mm]	Deepness [mm]	Weight [kg]	Iron losses [W]	Copper losses [W]	Efficiency	Height H [mm]	Lenght B[mm]	Deepness Q[mm]	Weight [kg]
BTTTFVS10	10	360	420	220	75	82	300	96,2	600	700	460	40
BTTTFVS12	12	360	420	250	93	95	360	96,2				
BTTTFVS15	15	360	420	280	115	120	420	96,4				
BTTTFVS20	20	410	480	250	140	140	580	96,4				
BTTTFVS25	25	410	480	300	160	205	670	96,5				
BTTTFVS30	30	410	480	340	175	220	800	96,6				
BTTTFVS35	35	410	480	350	195	240	950	96,6	800	900	650	70
BTTTFVS40	40	470	540	320	205	280	1010	96,8				
BTTTFVS50	50	470	540	340	240	330	1180	97,0				
BTTTFVS60	60	470	540	360	270	365	1350	97,1				
BTTTFVS70	70	560	590	420	290	430	1460	97,3				
BTTTFVS80	80	560	590	430	320	465	1630	97,4				
BTTTFVS90	90	560	590	440	335	490	1850	97,4	1000	1000	1000	100
BTTTFVS100	100	560	600	450	365	530	2100	97,4				
BTTTFVS110	110	580	620	450	370	590	2160	97,5				
BTTTFVS120	120	630	620	450	405	650	2230	97,6				
BTTTFVS130	130	630	620	480	425	690	2450	97,6				
BTTTFVS150	150	630	650	480	470	740	2720	97,7				
BTTTFVS200	200	720	680	520	590	965	3640	97,7	1200	1200	1200	140
BTTTFVS250	250	720	690	600	670	1090	4410	97,8				
BTTTFVS300	300	740	740	600	755	1210	5070	97,9				
BTTTFVS400	400	820	810	620	955	1610	5340	98,2				
BTTTFVS500	500	850	990	660	1100	1930	6960	98,2				

(*) Metallic box execution includes transformer installation into box and grounding of all metallic parts.





Three-phase isolating transformers for photovoltaic and wind-power systems



Notes:

1. Drawings, measurements and weights are indicative and can change without notice.

2. For powers and voltages not reported in the table or for special construction requirements, request the characteristics of the transformers from our technical office.

3. For more information contact our technical office and ask for the "Botter three-phase transformers for photovoltaic plants" specifications.

4. Transformers also suitable for wind-power and cogeneration plants.