WILSON
POWER SOLUTIONS

WILSON T2
ECOTRANS TRANSFORMERS

Cost effective Tier 2 EU Ecodesign compliant distribution transformer. The perfect choice for budget sensitive projects.

24 MONTH GUARANTEE

Our Wilson T2 CRGO transformers come with an industry leading 24 month guarantee from dispatch.*

Quality Standards and Regulation

Our transformers are designed to comply with and satisfy the high demands of modern distribution networks across different industries. Our R&D team closely monitors the developments of the global materials market, various technologies and emerging applications to continuously respond and improve our entire offer of transformers, ancillaries and supporting equipment.

Our Wilson T2 Ecotrans transformers are manufactured in accordance with internationally recognised standards (IEC) and comply with EU Ecodesign Tier 2 loss requirements. This range replaces our Wilson e1 range that became discontinued as a standard product with the effectiveness of Tier 2 regulations. In a case of a concession, we can manufacture distribution transformers according to Tier 1 or lower losses.

We design, manufacture and supply a comprehensive range of cold rolled grain-oriented steel (CRGO) distribution transformers. Wilson T2 are liquid immersed transformers available in both ONAN (oil) and KNAN (synthetic ester, MIDEL e.g.) options. Standard Wilson T2 is a three phase double wound transformer but alternative winding combinations can be custom designed and built upon request.

*Extended warranty time can be provided where required at an additional cost.

ECODESIGN
TRANSFORMER LOSSES

KVA Rating	1990's		PRE 2015		Tier 1 (2015) Wilson E1 Ecotrans		Tier 2 (2021) Wilson T2 Ecotrans	
	Load Losses	No Load Losses	Load Losses	No Load Losses	Load Losses	No Load Losses	Load Losses	No Load Losses
315	5618	660	5618	360	3900	360	2800	324
500	7770	940	7770	510	5500	510	3900	459
800	11550	1216	11550	650	8400	650	6000	585
1000	13125	1400	13125	770	10500	770	7600	693
1250	16800	1750	16800	950	11000	950	9500	855
1500	22050	2071	22050	1125	13140	1125	11285	1015
1600	22785	2200	22785	1200	14000	1200	12000	1080
2000	25200	2644	25200	1450	18000	1450	15000	1305
2500	29400	3200	29400	3200	22000	1750	18500	1575

Transformer loss comparison. All values are given in Watts [W] and refer to full load.

Wilson T2 Ecotrans distribution transformers comply with Ecodesign Tier 2 transformer losses. Tier 2 came into force in July 2021 replacing Tier 1 requirements and introducing even tougher design specifications. Tier 2 losses are 26% lower than Tier 1 which ensures all transformers installed in the UK have reduced energy waste and carbon emissions.

Rated Power	315kVA to 3MVA as a standard stock Higher and in between ratings are available on a special design and build
Primary Voltage	11kV (3.3, 6.6, 11/6.6 dual, 33 kV available on request)
Secondary Voltage	433V (other voltages available on request)
Transformer Type (liquid filled/dry type)	Oil immersed
Manufacturing standards	IEC 60076-1,2,3,4,5,7
Number of Phases	Three
HV Tap Settings	-5%, -2.5%, 0%, +2.5%, +5% Off-load tap changer (On-load tap changer available on request)
Voltage Regulation	DETC
Rated Frequency	50Hz
Vector Group	Dyn11 (other vector groups available on request)
Temperature Rise	60/65 oC
Cooling Type	ONAN or KNAN
Breathing Type	Free breathing or hermetically sealed
Radiators	Bolted on radiators
Primary and Secondary Termination	Air cable box type
Installation	Indoor and/or outdoor
Sound Level	As per ENA TS

KEY FEATURES

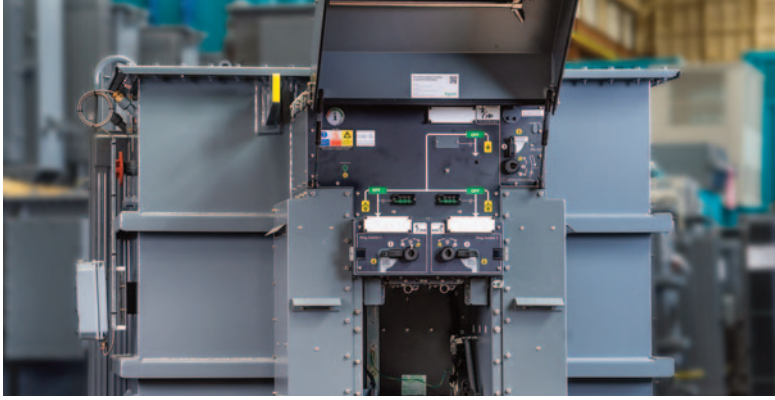
- Modern technology
- Lower energy losses
- Avoided carbon emissions
- Shorter lead time
- Proven quality and reliability
- Long lifecycle with low maintenance

Typical Ancillaries

- Oil temperature indicator (OTI)
- Winding temperature indicator (WTI)
- Magnetic oil level gauge (MOG)
- Pressure relief device (PRD)
- Dehydrating breather (Enviro Gel)
- Conservator and Buccholz relay
- Pressure vacuum gauge (PVG)
- Marshalling box
- On-load tap changer (OLTC)
- RMU's & LV Cabinets

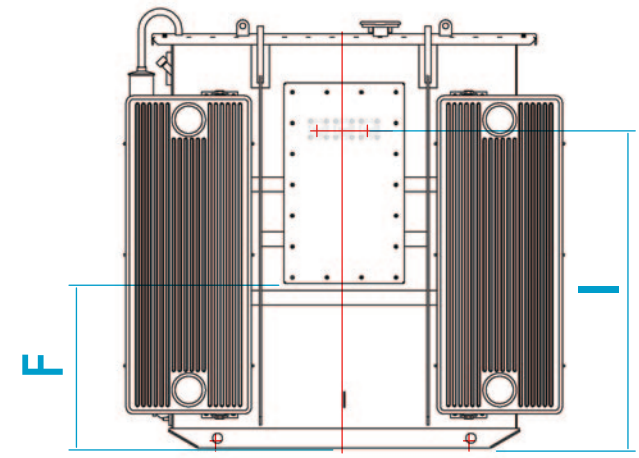
Typical Applications

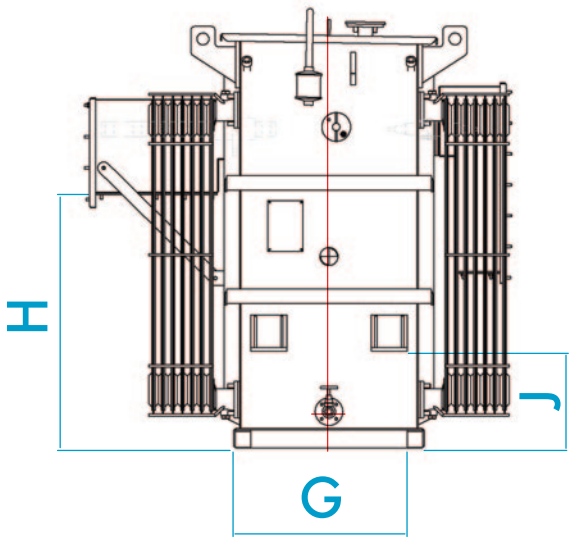
- Step down distribution transformers
- Step up generation transformers
- On-shore wind farm transformers
- Solar PV plant transformers
- EV charging infrastructure transformers
- Battery storage transformers
- Peaking plant transformers
- Earthing, isolation and starting transformers
- Industrial, NHS & Universities transformers

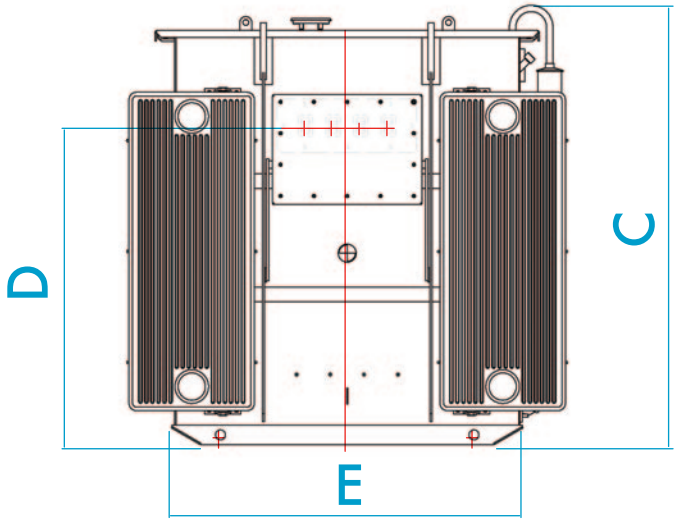


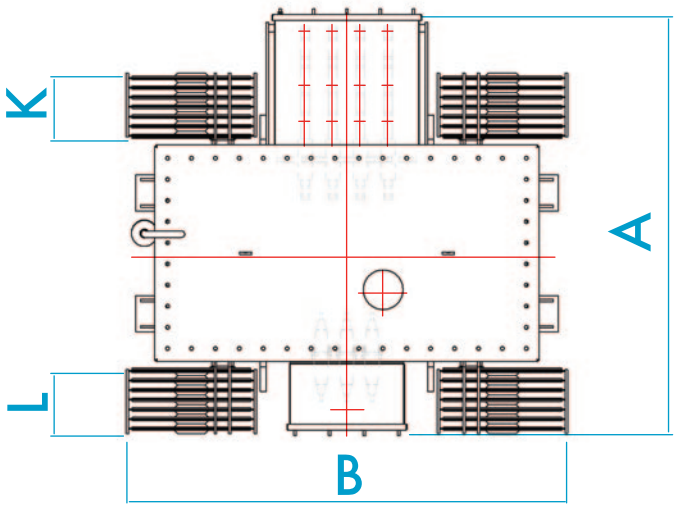
ELECTRICAL CHARACTERISTICS

Rating (KVA)	kV/V	HV LI/PF	LV LI/PF	Z	PO NL (W)	PO LL (W)	THD%	KG
315	11/433	75/28	-/3	4.75	2800	324	<5%	2100
500	11/433	75/28	-/3	4.75	3900	459	<5%	2500
800	11/433	75/28	-/3	4.75	6000	585	<5%	3300
1000	11/433	75/28	-/3	4.75	7600	693	<5%	3500
1250	11/433	75/28	-/3	5	9500	855	<5%	4000
1500	11/433	75/28	-/3	5.5	11285	1015	<5%	4300
1600	11/433	75/28	-/3	5.5	12000	1080	<5%	4640
2000	11/433	75/28	-/3	6	15000	1305	<5%	5125
2500	11/433	75/28	-/3	6	18500	1575	<5%	6750









Dimensions (mm)

Rating (KVA)	Tank type	A	B	C	D	E	F	G	H	I	J	K	L
315	1	1239	1595	1764	1320	1320	723	605	1049	1320	400	-	-
500	2	1239	1738	1764	1320	1320	723	605	1049	1320	400	71	-
800	2	1439	1738	1764	1320	1320	723	690	1049	1320	400	151	-
1000	2	1439	1738	1764	1320	1320	723	690	1049	1320	400	191	-
1250	2	1629	1780	1764	1320	1320	723	765	1049	1320	400	271	-
1500	3	1629	1780	1764	1320	1320	723	765	1049	1320	400	191	191
1600	3	1654	1768	1823	1320	1320	723	790	1049	1320	400	191	191
2000	3	1769	1828	1823	1320	1320	723	790	1049	1320	400	271	271
2500	4	1875	1985	2980	1720	1320	1123	850	1449	1720	400	391	311

Subject to a ±10% tolerance

Westland Works, Westland Square, Leeds LS11 5SS UK
T: +44 (0)113 271 7588 **E:** info@wilsonpowersolutions.co.uk
wilsonpowersolutions.co.uk