8

Dry-Type Distribution Transformers

Family of Dry-Type Distribution Transformers



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Product Description

Eaton's Cutler-Hammer® series of dry-type distribution transformers are electrical devices that transfer energy by magnetic induction from one circuit to another. They are typically used to change the voltage in an electric power system from its distribution level to the proper level for practical and safe use.

Typical loads for dry-type distribution transformers include lighting, heating, air conditioning, fans and machine tools. Such loads are found in commercial, institutional, industrial and residential structures.

Different types of dry-type distribution transformers are used for various applications throughout facilities. Therefore, dry-type distribution transformers are classified in distinct product groups as follows: general purpose—sand and resin encapsulated (EP and EPT); general purpose—ventilated (DS-3, DT-3, CSL3-2007, NEMA® Premium®); energy efficient (NEMA TP-1); shielded isolation; motor drive isolation (MD); nonlinear (KT); mini-power center (MPC); hazardous location, Buck-Boost and industrial control (MTA and MTC).

Product History

Originally a Westinghouse Product

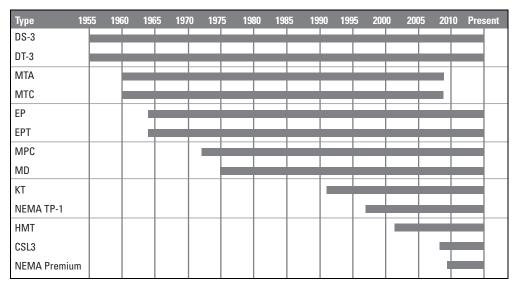
The first transformer built in the United States was manufactured by Westinghouse Electric in 1892. It was a 2 kVA drytype transformer. For over a century, Westinghouse

manufactured numerous varieties of transformers for countless applications worldwide.

The Westinghouse design transformer is now available through Eaton. Dry-type transformers, the workhorse of modern industry, are the foundation of modern AC power distribution. It is a

transformer that solves the problems of maintenance, installation, safety and efficiency by using air to cool the coils instead of liquids. Many older transformers, which in some cases pre-date the product families listed above, can be updated to the modern designs currently manufactured by Eaton.

Product History Time Line



Replacement Capabilities

Replacement Parts

Terminal Lug Kits for Type DT-3 Transformers ①

Typical Sizing	Terminal Lugs Cable Range	Terminal Lugs Quantity	Hardware Bolt Size	Hardware Quantity	Catalog Number
15–37.5 kVA single-phase 15–45 kVA three-phase	#14-#2 #6-250 kcmil	8 4	1/4–20 x 3/4	8	LKS1
50–75 kVA single-phase 75–112.5 kVA three-phase	#6-250 kcmil	12	1/4–20 x 3/4 1/4–20 x 1-3/4	8 8	LKS2
100–167 kVA single-phase 150–300 kVA three-phase	#6-250 kcmil #2-600 kcmil	3 22	1/4–20 x 3/4 3/8–16 x 2	3 16	LKS3
500 kVA three-phase	#2-600 kcmil	29	3/8-16 x 2	18	LKS4

Rodent Screens

Description	Frame Size(s) ②	Catalog Number
Rodent screens are used to discourage entry by birds or rodents.	908, 909	RS01
	910A, 911, 912	RS02
	913B, 914B, 915B	RS03
	916	RS04
	917, 918, 918A	RS05
	919, 920	RS06
	916A, 916B	RS07
	922	RS08
	923	RS09
	814, 821	RS11
	815	RS12
	816	RS13
	817, 818	RS14
	819, 820	RS15
	912B	RS16
	914D, 915D	RS17
	924	RS18
	928	RS19
	929	RS20

Replacement Parts for Mini-Power Centers

Frame	Deadfront Cover (Breaker Cover) Part Number	Front Cover Part Number	
283	47-37503	7074C98H04	
284	47-37503-2	7074C98H01	
285	47-37503-3	7074C98H02	
286	47-37503-4	7074C98H02	
287	47-37503-5	7074C98H03	
289	47-37459	7074C44H01	
290	47-37459-2	7074C44H02	
291	47-37459-3	7074C44H03	
289A	47-42072-1	7074C44H01	
290A	47-42072-2	7074C44H02	
291A	47-42072-3	7074C44H03	

- ① Lugs are rated AI/Cu and are suitable for use with either aluminum or copper conductors.
- 2 Effective June 1, 2001, frame numbers have a prefix of FR, i.e., FR819. Dimensions, accessories, etc. are still applicable as if the FR did not exist.

Replacement Capabilities

Replacement Parts

Case Parts for Ventilated Transformers

	Panels			
Frame(s) ①	Front or Back Part Number	Side (Two Required Per Transformer) Part Number	Bottom Part Number	Top Cover Part Number
Three-Phase, 600V Class	•			
908, 909	7073C37P01	1714C44P03	7073C20P05	1714C45P01
910, 911, 912	1714C46P01	1714C44P01	7073C20P01	1714C45P01
913A, 914A, 915A	1714C47P03	1714C44P07	7073C20P02	1714C45P02
916	1714C60P01	1714C56P01	7073C20P03	1714C58P01
917, 918	1714C65P01	1714C64P01	7073C20P04	1714C67P01
918A	47-41801	47-41800	47-41799	47-41802
919, 920	2D46331P03 (upper panel) 2D46331P04 (lower panel)	2D46332P01 2D46331P01 (cutout cover plate)	_	2D46331P02
922	2D46391H03 (back upper panel) 2D46391H06 (front upper panel) 2D46391H08 (lower panel)	2D46392H01		2D46391H02
923	47-45927-1	47-45925-1	47-45759-1	47-45926-1
910A, 911A, 912A	47-40592	47-40591	47-40589	1714C45P01
913B, 914B, 915B	47-40580	47-40578 47-41789	47-41792	1714C45P02
916A	47-41790	47-41789	47-41788	47-41791
FR916B	47-47351-1	47-47350-1	47-47-347-1	47-41791
912B	47-49323-1	47-49321-1	47-51964-1	47-49322-1
914D, 915D	47-49317-1	47-49315-1	47-51965-1	47-49316-1
924	47-53089-2 (upper panel) 47-53089-1 (lower panel)	47-53088-1	47-53087-1	47-53089-1
928	47-53777-1	47-53779-1	47-53778-1	1714C67H15
929	47-53786-1	47-53788-1	47-53787-1	47-41802-3
Single-Phase, 600V Clas	s			
809	7073C16P03	7073C18P04	7073C14P03	7073C17P01
810, 811, 835	7073C16P01	7073C18P01	7073C14P01	7073C17P01
812, 813, 836, 837, 838	7073C16P02	7073C18P02	7073C14P02	7073C17P02
814	7073C54P01	7073C18P05	7073C14P04	7073C17P03
815	47-39433	47-39430	47-39429	47-39431
816	47-40452	47-40451	47-40449	47-40453
817, 818	47-40457	47-40456	47-40454	47-40458
819, 820	47-40574	47-40573	47-40459	47-40575

Further Information

Publication Number	Description
B.36B.01.S.E	K-Factor Dry-Type Distribution Transformer Brochure
CA08100003E	Commercial Distribution Catalog, Volume 2, Tab 2
CA08104001E	Consulting Application Guide
B1228A	Industrial Control Transformer Binder
B.36F.01.S.E	Mini–Power Center Brochure
B.36D.01.S.E	Class 1, Division 2, Hazardous Location Transformer Brochure

Pricing Information

Price and Availability Digest (PAD)

Vista/VISTALINE™ (Discount Symbol DT-1)

Notes

① Effective June 1, 2001 frame numbers have a prefix of FR, i.e., FR819. Dimensions, accessories, etc. are still applicable as if the FR did not exist.

Parts listed are for standard catalog listed transformers. Units with modifications may require different parts. (Frame No. from transformer nameplate required.) Transformer nameplate and $\mathrm{UL}^{@}$ label are not field replaceable.