Section 10

Dry Type Transformers Servicenter Mini-Unit Substations Integral Transformer and Distribution Center

Product Description

This easily installed and serviceable unit incorporates a Type QMS transformer (single-phase) or a Type QL transformer (three-phase), a primary main circuit breaker, a secondary main circuit breaker, and a load-center-design breaker panel. Since these components don't have to be installed and interconnected separately, the contractor or user can reduce installation time and costs. Because of the single-unit concept, only one, handy Servicenter needs to be mounted.

Available in single-phase, 5 through 25 kVA, and in three-phase, 15 through 30 kVA, 600 Volt class ratings, the GE Servicenter is a convenient, economical way to meet your industrial and temporary power requirements.

The Transformer—The Servicenter utilizes GE transformer design which has twenty years of field-proven experience behind it and a long track record for assuring consistent, reliable performance. Type QMS transformers employ a 180°C UL Recognized insulation system with a 115°C rise. Type QL transformers employ a 220°C UL Recognized insulation system with a 150°C rise.

The Panel—The panel assembly includes the rugged GE PowerMark Plus[™] circuit breaker load center interior, E-frame primary breakers, and E-frame or Q Line secondary breakers. The load center will accept one-, two-, or three-pole (three-phase) common trip circuit breakers and ground fault breakers. All Servicenters come equipped with the properly sized primary main and secondary main circuit breakers installed and prewired. Branch breakers are not included.

Advantages

- Transformer, distribution panel and breakers are all designed, built and assembled by GE
- -Saves time and money pre-assembled, pre-wired unit saves time on the job
- -High reliability assembled and tested in our UL approved factory to assure consistency and quality
- Available GE ground-fault breakers ensure electrical safety around construction sites or wherever water may be present

Key Features

-Keyhole mounting flange facilitates easy mounting

-Indoor and outdoor use

- Front-accessible, hinged or removable panel door is safe and convenient
- -Heat barrier under core and coil provides electrical and thermal isolation for wiring compartment
- High-efficiency core construction results in quiet transformer operation and low no-load losses
- Factory installed and wired GE main and secondary main circuit breakers

Application

The single-phase Servicenter can be used wherever 480 Volt power is available and 120 or 240 Volt branch circuits are required. The three-phase Servicenter can be used wherever 240 VoltØ, 480 VoltØ or 600 VoltØ is available and 208 Volt Y/120 Volt circuits are required. The unit can be used in such applications as vending machine areas, construction laboratory test areas, general construction sites where temporary or quickly obtained power is required, or where future expansion of branch circuits is planned.

- -Vending or concession areas
- -Office buildings
- -Assembly lines
- -Mining applications
- -Parking lots
- -Light industrial areas
- -Warehouses
- -Construction sites

NEC Requirements

The Servicenter conforms with Article 450-3 of the 1993 National Electric Code.



Single-Phase Servicenter, Hinged Door Removed



Three-Phase Servicenter, Closed View



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Section 10

Single-Phase Servicenter

Single-Phase Indoor/Outdoor 60 Hz

Single-Phase and Three-Phase TP-1

Input Voltage	Output Voltage	kVA	Max. Branch Spaces 1 THQL, 1-pole	Max. Branch Spaces 1 THQL, 2-pole	Max. Branch Spaces 1/2 THQP, 1-pole	Max. Branch Spaces 1/2 THQP, 2-pole	Total 1-pole Spaces	Breaker Rating- Primary Main	Breaker Rating- Secondary Main	Product Number
480 Volts	120/240 Volts	5	6	3	12	4	12	25A	30A	9T21S1050
480 Volts	120/240 Volts	7.5	6	3	12	4	12	35A	40A	9T21S1070
480 Volts	120/240 Volts	10	8	4	16	6	16	50A	50A	9T21S1100
480 Volts	120/240 Volts	15	12	6	24	10	24	60A	70A	9T21S1150
480 Volts	120/240 Volts	25	20	10	8	2	24	100A	150A	9T21S1250

Three-Phase Indoor/Outdoor 60 Hz¹ TP-1

Input	Output		Max. Branch	Max. Branch	Total	Breaker Rating-	Breaker Rating-	Product
Voltage	Voltage	kVA	Spaces, 1-pole	Spaces 3-pole	1-pole Spaces	Primary Main	Secondary Main	Number
240 Volts	208Y/120 Volts	15	12	4	12	100A	50A	9T83B0001
240 Volts	208Y/120 Volts	22.5	18	6	18	100A	70A	9T83B0002
240 Volts	208Y/120 Volts	30	24	8	24	100A	100A	9T83B0003
480 Volts	208Y/120 Volts	15	12	4	12	40A	50A	9T83B0011
480 Volts	208Y/120 Volts	22.5	18	6	18	70A	70A	9T83B0012
480 Volts	208Y/120 Volts	30	24	8	24	90A	100A	9T83B0013
600 Volts	208Y/120 Volts	15	12	4	12	40A	50A	9T83B0021
600 Volts	208Y/120 Volts	22.5	18	6	18	40A	70A	9T83B0022
600 Volts	208Y/120 Volts	30	24	8	24	40A	100A	9T83B0023

 1 (3) 5% taps 1 above and 2 below rated primary volts.

Three-Phase Indoor/Outdoor 60 Hz¹ TP-1 Copper Transformer Windings

Input Voltage	Output Voltage	kVA	Max. Branch Spaces, 1-pole	Max. Branch Spaces 3-pole	Total 1-pole Spaces	Breaker Rating- Primary Main	Breaker Rating- Secondary Main	Product Number
240 Volts	208Y/120 Volts	15	12	4	12	100A	50A	9T83C0001
240 Volts	208Y/120 Volts	22.5	18	6	18	100A	70A	9T83C0002
240 Volts	208Y/120 Volts	30	24	8	24	100A	100A	9T83C0003
480 Volts	208Y/120 Volts	15	12	4	12	40A	50A	9T83C0011
480 Volts	208Y/120 Volts	22.5	18	6	18	70A	70A	9T83C0012
480 Volts	208Y/120 Volts	30	24	8	24	90A	100A	9T83C0013
600 Volts	208Y/120 Volts	15	12	4	12	40A	50A	9T83C0021
600 Volts	208Y/120 Volts	22.5	18	6	18	40A	70A	9T83C0022
600 Volts	208Y/120 Volts	30	24	8	24	40A	100A	9T83C0023



Section 10

Dry Type Transformers Servicenter Mini-Unit Substations Integral Transformer and Distribution Center

Outlines, Dimensions and Wiring Diagrams

Single-Phase

	Product	Approx Not	"^"	"0"	"C"	Framo	
kVA	Number	Weight (Lbs.)	Height (in.)	Width (in.)	Depth (in.)	Size	
5	9T21S1050	103	32.5	10.75	11.12	16350	
7.5	9T21S1070	147	32.5	10.75	11.12	16600	
10	9T21S1100	198	35	12.62	12.62	19400	
15	9T21S1150	220	35	12.62	12.62	19500	
25	9T21S1250	388	44.75	16.75	16	50500	

Three-Phase TP-1 Aluminum

	Product	Approx. Net	"B"	"A"		Frame
kVA	Number	Weight (Lbs.)	Height (in.)	Width (in.)	Depth (in.)	Size
15	9T83B0001	280	27.3	27.4	16.9	XV371
22.5	9T83B0002	450	32.2	34.5	24	XV372
30	9T83B0003	450	32.2	34.5	24	XV372
15	9T83B0011	280	27.3	27.4	16.9	XV371
22.5	9T83B0012	450	32.2	34.5	24	XV372
30	9T83B0013	450	32.2	34.5	24	XV372
15	9T83B0021	280	27.3	27.4	16.9	XV371
22.5	9T83B0022	450	32.2	34.5	24	XV372
30	9T83B0023	450	32.2	34.5	24	XV372



Dimensions Single-Phase

Three-Phase TP-1 Copper

kVA	Product Number	Approx Net Weight (Lbs)	"A" Height (in.)	"B" Height (in.)	"C" Height (in.)	Frame Size
15	9T83C0001	290	27.3	27.4	16.9	XV371
22.5	9T83C0002	460	32.2	34.5	24	XV372
30	9T83C0003	460	32.2	34.5	24	XV372
15	9T83C0011	290	27.3	27.4	16.9	Y371C
22.5	9T83C0012	460	32.2	34.5	24	Y372C
30	9T83C0013	460	32.2	34.5	24	Y372C
15	9T83C0021	290	27.3	27.4	16.9	XV371
22.5	9T83C0022	460	32.2	34.5	24	XV372
30	9T83C0023	460	32.2	34.5	24	XV372











Typical Wiring Diagram Three-Phase¹

¹For 22.5 and 15 kVA three-phase Servicenters, secondary main breaker is a backfed plug-in type with positive retainers.



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