

Example Information Needed for High Energy Arc Fault (HEAF) Equipment Donation

The following example has been provided in order to standardize the collection of applicable information to ensure consistency with donated equipment for the OECD HEAF project.

1. General Information

Equipment	<i>Provide a complete itemized list of each piece of equipment to be donated (also provided in OECD agreement equipment matrix)</i>
Complete Description	<i>Provide a complete description of the equipment to be donated. This description should include;</i> <ul style="list-style-type: none"> • <i>Equipment specifics i.e. equipment manufacturer cut sheets or spec sheet & Equipment Manual (if possible) (example provided as Attachment 1)</i> • <i>Size, Dimensions and Weight of equipment to be donated</i> • <i>Pictures of Equipment and Equipment nameplate (if available)</i>
Serial Numbers	<i>Provided equipment serial numbers if applicable</i>
Shipping information	<i>Provide all relevant shipping information for equipment to National Institute of Standards and Technology (NIST). This description should include</i> <ul style="list-style-type: none"> • <i>Transportation Method</i> • <i>Port of Departure/Port of Entry</i> • <i>Vessel information (if by boat)</i> • <i>Estimated timeline/ dates expected</i>
Shipping Address	National Institute of Standards and Technology 100 Bureau Drive Building 301, Room B185 Gaithersburg, Maryland, USA 20899 Attn: Laurean DeLauter
Equipment Access	<i>If the switchgear has the capability to be locked, ensure that all keys and locking mechanisms will be accounted for so Customs can readily inspect all equipment</i>

If you have any additional information that will be applicable to the donated equipment feel free to contact

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2. Attachment 1. Sample Spec Sheet



GE Network Transformers - Guide Form Specifications

Rating

Three phase – Self –cooled – 60 Hertz
 Oil-immersed; R'Temp; Silicone
 55/65C Rise 65C Rise

Select one

300kVA	1000kVA	2500kVA
500kVA	1500kVA	*3000kVA
750kVA	2000kVA	*step only

Select one

Vault Type [above ground – dry vaults].....
 Subway Type [below or above ground].....

Select one [primary voltage – max 34.4kV - 200BIL]
 - specify voltage -

Connected: Delta _____
 Wye _____

Select one [tap changer for de-energized operation only]

Primary taps: None.....
 Four 2 1/2 % below.....
 Two 2 1/2 % above & below.....
 Specify _____

Select one [secondary voltage – max step BIL is 95kV]

216GrdY/125 volts.....
 208GrdY/120 volts.....
 480GrdY/277 volts.....

Specify _____

Select one [neutral connection]

Standard solidly grounded low-voltage neutral blade.....
 Insulated low-voltage neutral bushing.....

Select one [primary disconnect and grounding switch-3 pole,
 3 position, electrically interlocked-closed/open/grd. feeder]

Dead Break.....
 Mag-Break [break magnetizing current only].....
 No Primary Switch.....

Select one [primary cable entrance--specify cable size]

Esna 200A wells, K1601, with hold down bracket.w/o.
 Esna 600A bush, K600T1.....
 Esna [specify] _____
 Wipe sleeve – 3 single-conductor... ..(1) 3 conductor.....
 Stuffing box – 3 single-conductor... ..(1) 3 conductor.....
 Pothead – 3 single-conductor..... ..(1) 3 conductor.....

Options

Low voltage bushings bolted not welded.....
 Primary entrance bolted not welded.....
 Primary entrance on tank cover not terminal chamber.....
 Primary entrance on front not top of chamber.....
 Hand Hole welded (ANSI) not bolted.....
 Ship can of terminal chamber compound with unit.....
 Provide phasing probe openings.....
 Provide viewing window for primary switch.....
 Provide special interlock scheme [specification required].....
 Provide low voltage junction box [specify terminations].....
 Provide thermometer with alarm contacts [specify].....
 Provide Qualitrol Relief [208-60, 10psi] on cover.....

Network Transformers:

Network Transformers are designed in accordance with ANSI C57.12.40 and constructed with the corrosion resistance equivalent of copper-bearing steel:

Cover and Base 0.50in thick

Tank wall and housings 0.312in thick

GE uses a special Network Transformer paint system for added corrosion resistance. Welded main cover, subbase, bushings, and liquid level gage are standard. Other valves, plugs, thermometer, etc are sealed threads. External hardware is austenitic stainless steel, silicon bronze or the functional equivalent. The finish is black and conforms to C57.12.32.

All characteristics, definitions, terminology, and voltage designations and tests, except as otherwise specified herein, shall be in accordance with the latest revisions of the following American National Standard Terminology, and Test Code for Distribution, Power, and Regulating Transformers:

General Requirements C57.12.00 (IEEE Std 462)

Terminology, C57.12.80

Test Code, C57.12.90

Loading, C57.92.19

Separable Connectors, IEEE Std 386

Terminal Markings and Connections, C57.12.70

Finish, C57.12.32

Subway Type Network Transformers are designed for frequent/continuous submersion and use flat panel radiators with the corrosion equivalence of 0.312 copper-bearing steel. Typical application is grid-type secondary network systems to serve high density load areas of cities. The Subway Type Network Transformer may also be used in dry vault applications if desired.

Vault Type Network Transformers are designed for dry vaults with occasional submersion using lighter weight panel radiators with the corrosion equivalence of 0.093 copper-bearing steel. Typical applications are skyscrapers, high rise apartments, large office or manufacturing facilities where the reliability of a Network System is required.



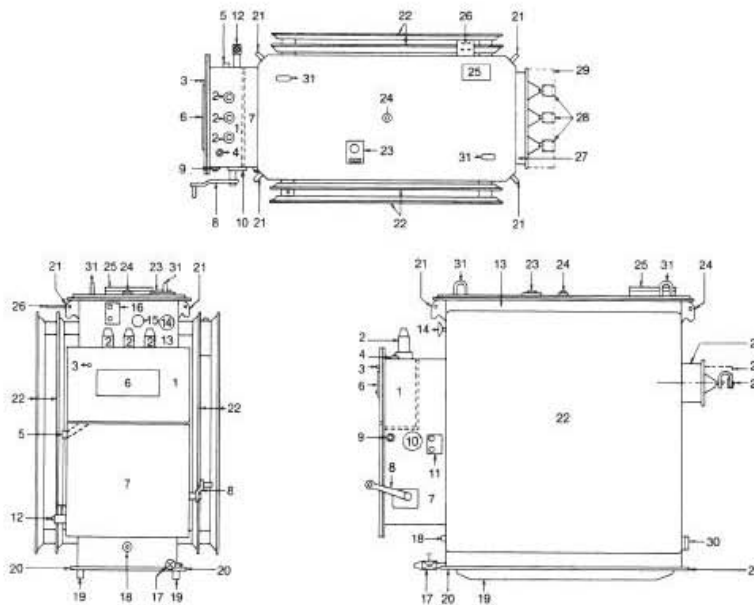
GE Industrial Systems

GE Commercial Transformer
 7000 Bert Kouns Industrial Loop, Shreveport, LA 71129-3008
 www.GEindustrial.com

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GE Network Transformers - Guide Form Specifications



Standard Accessories

1. TERMINAL CHAMBER (with clamp terminals for No. 2-250 MCM conductor connection to switch)
2. H-V wipe sleeve(s), stuffing box(s), or bushings
3. Vent and level plug (1/4 – inch brass at 25 C level)
4. Filling plug (1-inch brass NPT)
5. Drain nipple (1-inch brass NPT)
6. Diagrammatic nameplate
7. H-V SWITCH
8. Switch handle
9. Filling plug (1-inch brass NPT)
10. Welded-on magnetic liquid-level indicator
11. Liquid sampler and air test (two 1/2 – inch NPT openings at 85 C and 10 C level with two 1/2 inch Belknap No. 994 valves in air test opening)
12. Drain Valve and pipe plug (1 – inch NPT)
13. TRANSFORMER TANK (wall – 5/16 – inch thick; cover and base 1/2 – inch thick)
14. Thermometer with sealed tube (dial type without alarm contacts)
15. Welded – on magnetic liquid - level indicator
16. Liquid sampler and air test (two 1/2 – inch NPT openings at 85 C and 10 C level with two 1/2 – inch Belknap No. 994 valves in air test opening)
17. Drain and bottom filter valve (1 – inch NPT)
18. Grounding pad (5/8 – inch – 11 tap by 1 – inch deep)
19. Subbase (two 1 1/2 – inch high bars welded parallel to long axis)
20. Jacking provision (3 – inch clear space, 1 1/2 - inch high); jacking under 3/16 – inch subway panels is permissible)
21. Lifting lugs (with hole for attaching 1 – inch clevis)
22. Panel radiators (subway type 5/16 – inch thick; vault type are stainless steel equivalent corrosion resistance of 3/32 – inch copper-bearing steel)
23. Tap changer (operating knob under 2 – inch NPT brass plug for operation with standard 1 1/8 – inch T – type hexagonal socket wrench)
24. Filling plug and top filter-press connection (1 – inch brass NPT)
25. Handhole (10 x 14 – inch) for access to L-V neutral connection. Gasketed cover unless otherwise specified. Note: ANSI is welded)
26. L-V neutral (welded to tank, blade with 9/16 – inch holes on 1 3/4 - inch centers)
27. L-V flanged throat (for connection to protector)
28. L-V bushing terminals with flexible connectors
29. L-V bushing shipping guard
30. Support lugs for protector
31. Loops for lifting transformer cover



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