

| 15000/18750 KVA, 3 Ph, 60 Hz, 65 Rise, Fluid: EnviroTemp, Circular Core+Coil | | | | | CoreDetails: M6 StepLap D-Yoke CoreGrad 28.52 | | | | |
|--|--|--|--|--|---|--|--|--|--|
| Winding Number | | | | | Flux Den(T) = 1.72275 Tie Plt Thk = 0.375 | | | | |
| Name & BIL | | | | | Volts/Turn = 63.2047 Tie Plt Width = 4 Fe Circle = 17.495 | | | | |
| Material | | | | | Window Ht = 54.875 Window Width= 14.625 Stk/Width = 0.956 | | | | |
| Connection | | | | | Leg Center = 31.625 Core Length = 80.25 | | | | |
| Line-Line Voltage | | | | | Lam Stack Stack Weight | | | | |
| Max Coil Voltage | | | | | Width Ht Area | | | | |
| Coil Voltage | | | | | Core Duct = 0.1875 thk | | | | |
| Min Coil Voltage | | | | | 17 3.938 66.938 5906 | | | | |
| Rated Coil Amps | | | | | 16 2.875 46 4031 | | | | |
| Max Coil Amps | | | | | 15 2 30 2614 | | | | |
| Maximum Turns | | | | | 14 1.375 19.25 1669 | | | | |
| Rated Turns | | | | | 13 1.25 16.25 1402 | | | | |
| Minimum Turns | | | | | 12 1 12 1030 | | | | |
| Type Of Wdg | | | | | 11 0.875 9.625 821 | | | | |
| Trns/Lyr #OfDisc | | | | | 9 1.5 13.5 1134 | | | | |
| #OfLyr#Trns/Disc | | | | | 6 1.25 7.5 619 | | | | |
| Standard Cond. | | | | | Total -> 16.063 221.063 19226 + 0.1875 | | | | |
| Bare Cond Thk | | | | | Each Core-End-Duct = 0.25 | | | | |
| Bare Cond Width | | | | | Each Core-Side-Duct= 0.25 | | | | |
| Total Paper Insul | | | | | Core Tube Thk (total)= 0.4330 | | | | |
| Strand Area | | | | | Each Tube-End-Duct= | | | | |
| Pulls W X H EaGrp | | | | | Each Tube-Side-Duct= | | | | |
| #of Parallel Grps | | | | | Phase to Phase = 1.250 | | | | |
| Total Cond Area | | | | | Coil To Tank Clearance | | | | |
| Rated/Max A/in2 | | | | | Right = 4.5 Left = 4.5 | | | | |
| Side Radial Build | | | | | Front = 8 Back = 8 | | | | |
| End Rad Bld | | | | | Coil Dia = 31.125 X 31.125 | | | | |
| Eff Rad Bld/WH | | | | | C&C Lg x Ht = 94.5 X 88.875 | | | | |
| Space Factor | | | | | Tank W X D X Ht | | | | |
| I.D. | | | | | 103.5 X 47.25 X 119 | | | | |
| O.D. | | | | | Terminal Pair @KVA CGR %IX %IR BusZ %IZ | | | | |
| Mean Turn | | | | | TV to LV 7500 0.438 1.355 0.500 0.294 1.810 | | | | |
| Cond Lgth (ft) | | | | | TV to HV 7500 0.948 4.490 0.419 0.148 4.883 | | | | |
| Lead Lgth(ft) | | | | | LV to HV 7500 0.430 2.877 0.445 0.148 3.204 | | | | |
| Cond/Lead Wt(lbs) | | | | | HV to (LV+TV) 15000 7.182 | | | | |
| Wdg Resis @ 85 | | | | | Terminal Pair NLL Load Loss Total Loss | | | | |
| Lead Resis @ 85 | | | | | TV to LV 19021 37493 56514 | | | | |
| Bus Resis @ 85 | | | | | TV to HV 19021 31419 50440 | | | | |
| I2R Loss | | | | | LV to HV 19021 33353 52374 | | | | |
| Wdg Eddy/Stray | | | | | HV to (LV+TV) 19021 93368 112389 | | | | |
| Total Loss in Wdg | | | | | 18261*0.982 Exp=18261 Exp=76061 | | | | |
| KS/Circle/Width | | | | | Weights And Std Cost | | | | |
| KS thk/# Btwn Disc | | | | | Material Weight(lbs) Cost/Lb(\$) Total Cost(\$) | | | | |
| KS thk/# Intra Turn | | | | | TV Conductor 1179 6.23 7346 | | | | |
| Add #OfKS/Col/Grp | | | | | LV Conductor 1355 6.23 8442 | | | | |
| #OfGap/AvgHt | | | | | HV Conductor 3452 5.55 19159 | | | | |
| GapBetweenGrps | | | | | Core M6 19226 2.205 42394 | | | | |
| Duct Under/Over | | | | | Insulation + others 1531 std 7308 | | | | |
| Watts/in2 OA/Max | | | | | Total 26743 84649 | | | | |
| Gradient OA/Max | | | | | Elec+RadCost 114901 | | | | |
| S_Grad OA/Max | | | | | Total Cond Wt 5986 | | | | |
| ElecHt | | | | | DRAW SKETCHES HERE | | | | |
| Wire Space (Mech) | | | | | Sales Total = \$86952 | | | | |
| KeepBack/InternalKB | | | | | Saving= 2.6%,2303\$ | | | | |
| WdgSpace/toTop/BotYoke | | | | | HV LV | | | | |
| Lead Type | | | | | HV- [ATC] Seg II | | | | |
| Load Loss | | | | | LV-[ATC] Seg IV | | | | |
| Summary | | | | | 2R+1F | | | | |
| DETC (Part# ; Current Rating ; BIL) | | | | | 5R+3F | | | | |
| Radiators (&fans): | | | | | | | | | |
| Radiators- 19W220C28U (7 Nos.) | | | | | | | | | |
| FAN- 7400CFM,26"(4 NOS.)(60.10 dB) (For FFA) | | | | | | | | | |
| -HV stress-28000 PSI | | | | | | | | | |
| -LV1 LV2 Stress-30000 PSI | | | | | | | | | |
| Prep. by: RNC | | | | | Chkd. by: GPS | | | | |