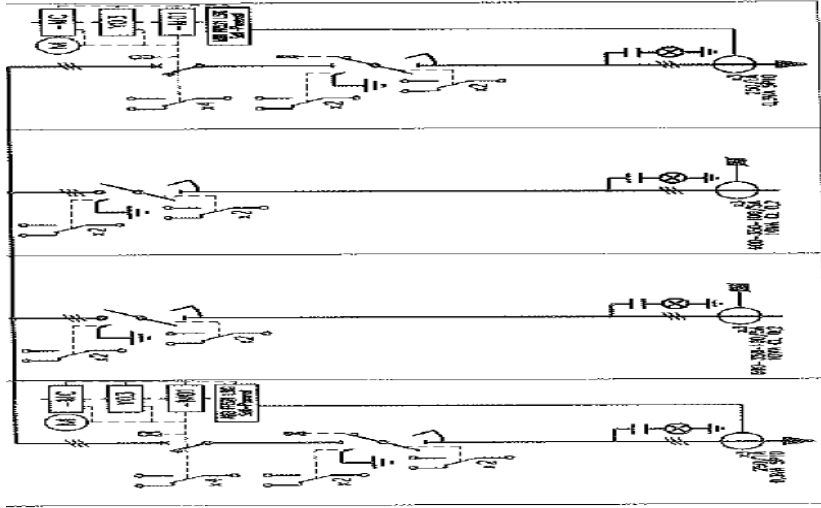


**PLANT BOARD DETAILS**

1	Ambient Temp °C, Altitude mtrs above msl & RH %1		40,1500 & 95		
2	Number of Transformer in Package & type		2 & Indoor, Dual frequency, ONAN, Multi Tap, Continuous		
3	Rating of each transformer in kVA 60 Hz		2500		
4	Phase / Wire & class of Insulation		3φ / 4W neutral on LV & HV side & A		
5	Impulse Voltage HV kV <sub>p</sub> , Power frequency kV <sub>rms</sub> (HV / LV)		95/125,38/50		
6	Temperature Rise in °C (Oil / Winding )		50 / 55 over ambient of 50 °C		
7	Vector Group		YNd11		
8	Type of Cooling		ONAN		
9	Efficiency at 24 kV, 0.8 pf, 50Hz & 100 % Load		98.66		
10	No load loss 50 / 60 Hz & Load loss at 75 °C & 24kV in kW <sub>2</sub>		3.5 & 28.0		
11	Voltage Chart				
	Vector Group	Low Voltage V @ 50Hz/ 60Hz	LV Current A @ 50Hz/ 60Hz	HV Voltage V @ 50 / 60Hz	HV Current A @ 50 / 60 Hz
	YNd11	400 / 480	3608.4 / 3007	11550/ 13860	124.97 / 104.14
				11275/ 13530	128.02 / 106.68
				11000 / 13200	131.22 / 109.35
				10725 / 12870	134.58 / 112.15
				10450 / 12540	138.12 / 115.1
				7150/ 8580	201.87 / 168.23
				6875/ 8250	209.95 / 174.96
				6600 / 7920	218.69 / 182.24
				6325 / 7590	228.2 / 190.17
				6050 / 7260	238.57 / 198.81
				14300 / 17160	201.87 / 84.12
				13750 / 16500	209.95 / 87.48
				13200 / 15840	218.69 / 91.13
	12650 / 15180	228.2 / 95.08			
	12100 / 14520	238.57 / 99.41			
	Remarks Each transformer comes filled with mineral oil; Top plate of transformer has selector switches to select a) vector group, b) voltage change over and c) voltage selection; Marshalling box of each transformer controls its own cooling fans linked with temp of oil & high pressure have been built; Local temp indication & remote indication are available				
12	Number of LV Isolators & rating		6 (3 on each transformer) & 2000 A		
13	Configuration of 24kV, 16kA Ring Main unit (RMU)		RMU comprises 4 sections outward on both sides housing an isolator & VCB while inward sections house a switch in a CLLC configuration.		
14	Current rating of switch / Isolator / CB / busbar in A		630 A		
15	Rated short time withstand / Peak withstand current in kA		21 in 1sec / 52.5		
16	Rated insulation Voltage / Power Freq withstand voltage / Lighting impulse withstand voltage kV		24 / 50 / 125		
17	CT [C] ; CT [L] ratio LV;HV		300:1A -5P10-5VA ; 5000/1A-5P10-15VA		
18	RMU 24 kV, SLD (CLLC)		 <p>This line called C gets connected to transformer 2. It has a protection class CT, an Isolator followed by VCB that gets connected to a bus.</p> <p>This line goes to load side called L provided with a switch and then a metering CT within RMU. PT is located outside RMU and is connected through load cable</p> <p>This line goes to load side called L provided with a switch and then a metering CT within RMU. PT is located outside RMU and is connected through load cable</p> <p>This line called C gets connected to transformer 1. It has a protection class CT, an Isolator followed by VCB that gets connected to a bus.</p>		



## TRANSFORMER DATA SHEET - 5MVA

\* ENERZIA CONTROLLED TDS No.5/HA

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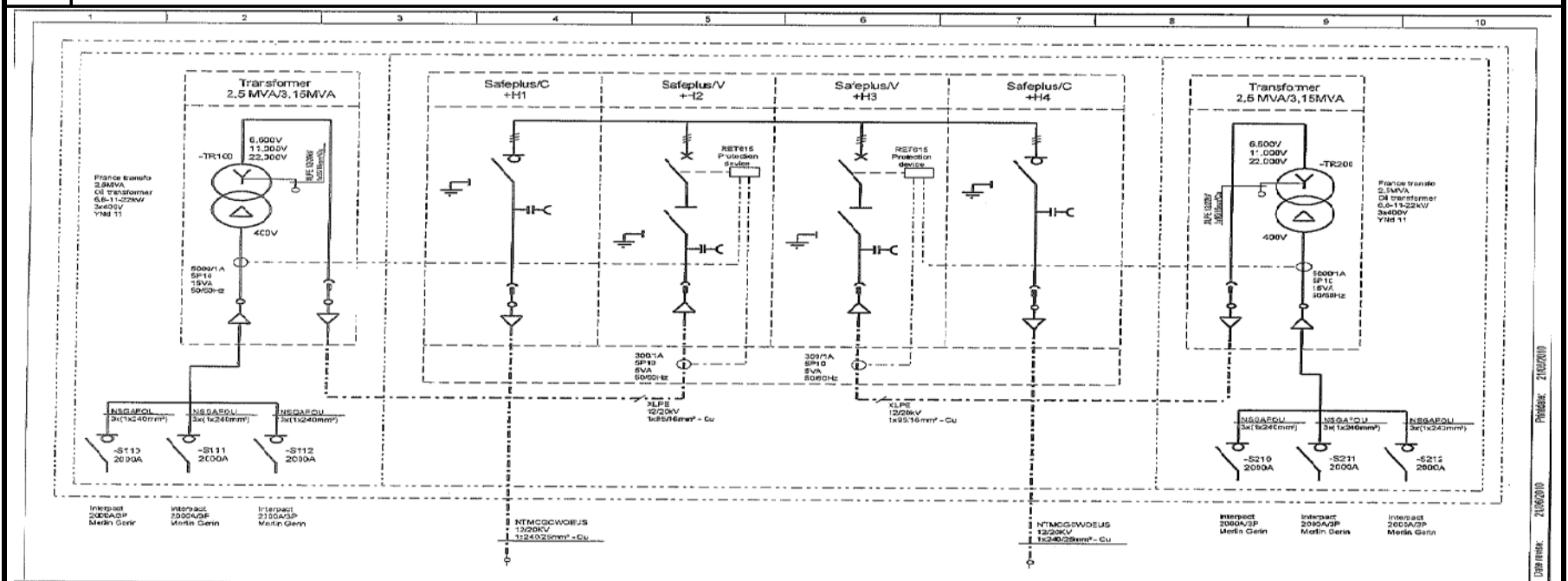
### CONTROL, PROTECTION & GENERAL DATA

- 19 Control & Relay Transformer panel is provided inside this package mounted on top of RMU to control, operate, monitor & protect package; A battery unit provides 24V DC supply for breaker operation along with charger. Panel receives external supply through 63A TPN breaker for distributing external supply to power pack.
- 20 The RMU are equipped with ABB RET615 self powered protection devices.  
 Isolator's - Type: TPR6; In (A) - 630A; I<sub>cw</sub> (kA) - 16kA  
 Switch - Type: TPR6; In (A) - 630A; I<sub>cw</sub> (kA) - 16kA  
 Circuit Breaker - Type: Vacuum C.B; In (A) - 630A; I<sub>cw</sub> (kA) - 16kA  
 C.T Ratio : Type - KOKM 1DC6 300/1; TRP180 ; 5000A/1
- 21 Transformer package has ladder to access roof of container where one can remove separate covers for transformer & RMU; Transformer has its own cooling fans that is integrated to its own temperature circuit while in addition. Transformer package is fully tested functionally while its integrity, interlock, safeties, polarity & ratio tests conducted.

### WEIGHT & DIMENSIONAL DATA

			With doors open			With doors close		
			Length(L)	Width (W)	Height(H)	Length(L)	Width (W)	Height(H)
22	Overall Dimension of Transformer Pack	Mm	8496	4876	2896	6058	2438	2896
23	Total Weight of Transformer Pack Dry	Kg	12,960					
24	Total Weight of Transformer Pack Dry	Kg	18,000					

- 25 Container is outdoor type, ISO certified, high cube, CSC plated with tracing reference that can be furnished  
 Package rating has been defined under specified environmental conditions for all equipment.  
 Controller meets with IEC 60255-26 & EN 61000-6-1/2/3/4 standards  
 RMU confirms to IEC 62271-1 standard in general with switchgear classification of PM class, loss of service continuity of LSC2, intergal arc classification of AFL including standards 62271-200, 62271-103, 62271-100,62271-102,62271-105 & IEC 60529  
 Rated short time withstand current is 21kA<sub>rms</sub> ans isolator confirms to IEC 60947-3 standards. 2000A is a derived rating at specified environmental conditions. Actual rating is 2500A at 415VAC & AC228 utilisation category



<p>DSG Belgium bvba          Clode Basse 113          B-2616 Wilrijk          Tel.: +32 (0)3 827 34 22          Fax: +32 (0)3 825 85 72</p>	Client: AL FARIS EQUIPMENT RENTALS LLC P.O. box 28089 DUBAI - UAE Site:	Title: 20' Container 6,500 - 11,000 - 22,000V, 3x400V 2x 2,5 MVA (ONAN) - 2x 3,15 MVA (CNAF) Single line diagram	File: 2010039 Function: Date: 28/03/2010	Project: PB100307 Location: Drawing nr.: 2114b	Des.: IMS Control: SMN Sheet: 3
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