

Single Line Diagram area Sungai Kenawang

DATA BEBAN-BEBAN PADA *PROCESS LV SWITCHBOARD*

No.Unit	Keterangan Alat	η	pf	V	kW	kVAR	kVA
SK-15-EM-01AA1	SK Production Cooler AA1	0.92	0.86	400	30	12.78	32.6
SK-15-EM-01AA2	SK Production Cooler AA2	0.92	0.86	400	30	12.78	32.6
SK-15-EM-01AB1	SK Production Cooler AB1	0.92	0.86	400	30	12.78	32.6
SK-15-EM-01AB2	SK Production Cooler AB2	0.92	0.86	400	30	12.78	32.6
SK-15-EM-01BA1	SK Production Cooler BA1	0.92	0.86	400	30	12.78	32.6
SK-15-EM-01BA2	SK Production Cooler BA2	0.92	0.86	400	30	12.78	32.6
SK-15-EM-01BB1	SK Production Cooler BB1	0.92	0.86	400	30	12.78	32.6
SK-15-EM-01BB2	SK Production Cooler BB2	0.92	0.86	400	30	12.78	32.6
SK-25-EM-02A1	Treated Gas Cooler A1	0.91	0.84	400	18.5	8.43	20.3
SK-25-EM-02A2	Treated Gas Cooler A2	0.91	0.84	400	18.5	8.43	20.3
SK-25-EM-04A1	Lean Solvent Cooler A1	0.92	0.86	400	30	12.78	32.6
SK-25-EM-04A2	Lean Solvent Cooler A2	0.93	0.86	400	30	11.86	32.26
SK-25-EM-04B2	Lean Solvent Cooler B2	0.93	0.86	400	30	11.86	32.26
SK-25-EM-04B1	Lean Solvent Cooler B1	0.92	0.86	400	30	12.78	32.6
SK-25-EM-04C1	Lean Solvent Cooler C1	0.92	0.86	400	30	12.78	32.6
SK-25-EM-04C2	Lean Solvent Cooler C2	0.93	0.86	400	30	11.86	32.26
SK-25-EM-05A1	Acid Gas Condenser-A1	0.8	0.82	400	2.2	1.65	2.75
SK-25-EM-05A2	Acid Gas Condenser-A2	0.78	0.8	400	2.2	1.77	2.82
SK-25-PM-02A	Rich Solvent Pump A	0.95	0.87	400	75	24.6	78.95
SK-25-PM-02B	Rich Solvent Pump B	0.95	0.87	400	75	24.6	78.95
SK-25-PM-04A	Amine Regenerator Reflux Pump A	0.87	0.92	400	7.5	4.25	8.62
SK-25-PM-04B	Amine Regenerator Reflux Pump B	0.87	0.92	400	7.5	4.25	8.62
SK-25-PM-07A	Solvent Drain Pump A	0.86	0.92	400	5.5	3.26	6.39
SK-25-PM-09A	Transfer pump A	0.87	0.92	400	7.5	4.25	8.62
SK-25-PM-11A	LP Anti foam injection pump A	0.77	0.76	400	0.55	0.46	0.7
SK-25-PM-11B	LP Anti foam injection pump B	0.77	0.76	400	0.55	0.46	0.7
SK-25-PM-12A	HP Anti foam injection pump A	0.77	0.76	400	0.55	0.46	0.7
SK-25-PM-12B	HP Anti foam injection pump B	0.77	0.76	400	0.55	0.46	0.7

SK-25-YM-03	Antifoam Mixer	0.73	0.81	400	1.1	1.03	1.5
SK-30-KM-02	Purging Air Fan	0.77	0.8	400	1.5	1.24	1.95
SK-30-EM-01A1	Regeneration Gas Cooler A1	0.87	0.85	400	11	6.23	12.64
SK-30-EM-01A2	Regeneration Gas Cooler A2	0.87	0.85	400	11	6.23	12.64
SK-30-KM-01	Regeneration Gas Compressor	0.95	0.87	400	75	24.65	78.95
SK-30-K-01-PM-01	Lube Oil Pump	0.72	0.8	400	0.55	0.53	0.76
SK-30-K-01-EM-01	Air Fin Cooler	0.84	0.78	400	1.1	0.71	1.3
SK-35-EM-01A1	Stabilizer NGL Product Cooler A1	0.92	0.86	400	30	12.78	32.6
SK-35-EM-01A2	Stabilizer NGL Product Cooler A2	0.92	0.86	400	30	12.78	32.6
SK-35-EM-02AA1	Stabilizer Overhead Compressor Aftercooler AA1	0.83	0.82	400	4	2.69	4.82
SK-35-EM-02AA2	Stabilizer Overhead Compressor Aftercooler AA2	0.83	0.82	400	4	2.69	4.82
SK-35-EM-02BA2	Stabilizer Overhead Compressor Aftercooler BA2	0.83	0.82	400	4	2.69	4.82
SK-35-EM-02BA1	Stabilizer Overhead Compressor Aftercooler BA1	0.83	0.82	400	4	2.69	4.82
SK-35-K-01A-EM-01	Stabilizer Overhead Compressor Lube Oil Cooler A	0.73	0.79	400	1.5	1.4	2.05
SK-35-K-01B-EM-01	Stabilizer Overhead Compressor Lube Oil Cooler B	0.73	0.79	400	1.5	1.4	2.05
SK-35-K-01A-PM-01	Stabilizer Overhead Compressor Lube Oil Pump A	0.8	0.82	400	4	3	5
SK-35-K-01B-PM-01	Stabilizer Overhead Compressor Lube Oil Pump B	0.8	0.82	400	4	3	5
SK-40-PM-01A	Produced Water Pump A	0.93	0.86	400	37	14.6	39.78
SK-40-PM-01B	Produced Water Pump B	0.93	0.86	400	37	14.6	39.78
SK-45-EM-03A1	De-ethanizer NGL Product Cooler A1	0.87	0.85	400	11	6.23	12.6
SK-45-EM-03A2	De-ethanizer NGL Product Cooler A2	0.87	0.85	400	11	6.23	12.6
SK-45-EM-05A1	Expander Compressor After Cooler A1	0.92	0.86	400	30	12.78	32.6
SK-45-EM-05A2	Expander Compressor After Cooler A2	0.92	0.86	400	30	12.78	32.6
SK-45-E-07	Reservoir Heater	0.8	0.82	400	3	2.25	3.75
SK-45-PM-02A	Expander/Recompr LO Pump A	0.86	0.84	400	7.5	4.4	8.7

SK-45-PM-02B	Expander/Recompr LO Pump B	0.86	0.84	400	7.5	4.4	8.7
SK-45-EM-06	Expander/Recompr Cooler Fan	0.78	0.8	400	22	17.6	28.2
SK-45-PM-03	Expander/Recompr Fill Pump	0.83	0.82	400	4	2.69	4.82
SK-45-PM-01A	De-ethanizer Reflux Pump A	0.87	0.85	400	11	6.23	12.6
SK-45-PM-01B	De-ethanizer Reflux Pump B	0.87	0.85	400	11	6.23	12.6
SK-50-EM-01AA1	SG Compressor Aftercooler AA1	0.92	0.86	400	30	12.78	32.6
SK-50-EM-01AA2	SG Compressor Aftercooler AA2	0.92	0.86	400	30	12.78	32.6
SK-50-EM-01BA1	SG Compressor Aftercooler BA1	0.92	0.86	400	30	12.78	32.6
SK-50-EM-01BA2	SG Compressor Aftercooler BA2	0.92	0.86	400	30	12.78	32.6
K01A-B321	Pre/Post Lube Oil Pump SGC-A	0.83	0.82	400	4	2.69	4.82
K01B-B321	Pre/Post Lube Oil Pump SGC-B	0.83	0.82	400	4	2.69	4.82
K01A-B330	Starter Motor SGC – A	0.94	0.87	400	56	20.32	59.57
K01B-B330	Starter Motor SGC – B	0.94	0.87	400	56	20.32	59.57
SK-50-EM-02A	Lube Oil Cooler Fan SGC-A	0.86	0.84	400	7.5	4.45	8.72
SK-50-EM-02B	Lube Oil Cooler Fan SGC-B	0.86	0.84	400	7.5	4.45	8.72
K01A-B596-1	Enclosure Vent Fan SGC-A1	0.86	0.84	400	7.5	4.45	8.72
K01A-B596-2	Enclosure Vent Fan SGC-A2	0.86	0.84	400	7.5	4.45	8.72
No.Unit	Keterangan Alat	□	pf	V	kW	kVAR	kVA
K01B-B596-1	Enclosure Vent Fan SGC-B1	0.86	0.84	400	7.5	4.45	8.72
K01B-B596-2	Enclosure Vent Fan SGC-B2	0.86	0.84	400	7.5	4.45	8.72
K01A-K422	Battery Charger SGC-A	0.9	0.8	230	1.2	0.58	1.33
K01B-K422	Battery Charger SGC-B	0.9	0.8	230	1.2	0.58	1.33
SK-81-ED-05	Heat Tracing-1 (Unit 45, 50, 70)	0.9	1	400	25	12.1	27.78
SK-25-P-03A-EM-01	Seal Cooler Lean Solvent Booster Pump A	0.72	0.58	400	0.55	0.5	0.76
SK-25-P-03B-EM-01	Seal Cooler Lean Solvent Booster Pump B	0.72	0.58	400	0.55	0.5	0.76
SK-65-P-01-EM-01A	Seal Cooler Hot Oil Circulation Pump 1A	0.77	0.8	400	1.5	1.24	1.95
SK-65-P-01-EM-02A	Seal Cooler Hot Oil Circulation Pump 1A	0.77	0.8	400	1.5	1.24	1.95
SK-65-P-01-EM-01B	Seal Cooler Hot Oil Circulation Pump 1B	0.77	0.8	400	1.5	1.24	1.95
SK-65-P-01-EM-02B	Seal Cooler Hot Oil Circulation Pump 2B	0.77	0.8	400	1.5	1.24	1.95

SK-50-WH-01A-KM-01	WHRU Seal blower A	0.78	0.8	400	2	1.6	2.56	
SK-50-WH-01B-KM-01	WHRU Seal blower B	0.78	0.8	400	2	1.6	2.56	
SK-50-WH-01A-XM-01	WHRU Guillotine actuator A	0.86	0.84	400	2	1.18	2.32	
SK-50-WH-01B-XM-01	WHRU Guillotine actuator B	0.86	0.84	400	2	1.18	2.32	
SK-81-ED-06	Heat Tracing-2 (Unit 18,30)	0.9	1	400	25	12.1	27.78	
Total Beban						1404.35	620.97	1540.95

DATA BEBAN-BEBAN *UTILITY LV SWITCHBOARD*

No.Unit	Keterangan Alat	η	pf	V	kW	kVAR	kVA
SK-25-PM-01A	Water Wash Pump A	0.83	0.82	400	3.7	2.58	4.51
SK-25-PM-01B	Water Wash Pump B	0.83	0.82	400	3.7	2.58	4.51
SK-25-PM-06A	Water Make Up Pump A	0.89	0.81	400	7.5	5.43	9.26
SK-25-PM-06B	Water Make Up Pump B	0.89	0.81	400	7.5	5.43	9.26
SK-25-PM-06C	Water Make Up Pump C	0.89	0.81	400	7.5	5.43	9.26
SK-25-PM-13A	Solvent Drain Drum Sump Pump A	0.83	0.82	400	4	2.79	4.88
SK-65-PM-02	Hot Oil Make-up Pump	0.78	0.8	400	2.2	1.65	2.75
SK-65-KM-01A	Hot Oil Heater Purging Air Fan A	0.78	0.8	400	2.2	1.65	2.75
SK-65-KM-01B	Hot Oil Heater Purging Air Fan B	0.78	0.8	400	2.2	1.65	2.75
SK-75-PM-01A	LP Flare KO Drum Pump A	0.83	0.82	400	4	2.79	4.88
SK-75-PM-02A	LP Flare KO Drum Booster Pump A	0.93	0.86	400	37	21.95	43.02
SK-75-PM-03	LP Flare KO Drum Sump Pump B	0.83	0.82	400	4	2.79	4.88
SK-81-ES-01W01	Welding Receptable-1	1	0.85	400	10	6.19	11.76
SK-81-ES-01W02	Welding Receptable-2	1	0.85	400	10	6.19	11.76
SK-81-ES-01W03	Welding Receptable-3	1	0.85	400	10	6.19	11.76
SK-81-ES-01W04	Welding Receptable-4	1	0.85	400	10	6.19	11.76

SK-81-ES-01W05	Welding Receptable-5	1	0.85	400	10	6.19	11.76
SK-81-ES-01W06	Welding Receptable-6	1	0.85	400	10	6.19	11.76
SK-83-ER-01	Main AC UPS Feeder A	0.95	0.8	400	180	135	225
SK-83-ER-02	110V DC UPS Feeder A	0.95	0.8	400	22	16.5	27.5
SK-81-EL-01	Lighting Panel for Area 25 (under pipe rack)	0.9	0.85	400	34.15	21.16	40.17
SK-81-EL-02	Lighting Panel for Area 45 (under pipe rack)	0.9	0.85	400	55.6	34.46	65.41
SK-81-EL-03	Lighting Panel for Security Post (emergency gate)	0.9	0.85	400	31.5	19.52	37.06
SK-81-EL-06	Lighting Panel for Ware House	0.9	0.85	400	66.6	41.27	78.35
SK-81-EL-07	Lighting Panel for Switchroom	0.9	0.85	400	17.3	10.72	20.35
SK-81-EL-09	First Aid & Laboratories	0.9	0.85	400	111.5	69.1	131.17
SK-81-ED-01	Distribution Board for Area 35 (under pipe rack)	0.9	0.85	400	4.5	2.79	5.29
SK-85-EM-01A	Air Compressor Cooler A	0.86	0.84	400	7.5	4.8	8.93
SK-85-KM-01A	Air Compressor A	0.96	0.86	400	132	78.32	153.49
SK-90-PM-03A	Demineralized Water Pump A	0.73	0.81	400	11	7.96	13.58
SK-90-PM-03B	Demineralized Water Pump B	0.73	0.81	400	11	7.96	13.58
SK-96-PM-03	Cold Close Drain Pump	0.8	0.82	400	3	2.09	3.66
SK-97-PM-01	Skim Oil Pump	0.78	0.8	400	2.2	1.65	2.75
SK-98-PM-02A	Methanol Injection Pump A	0.86	0.84	400	7.5	4.84	8.93
SK-98-PM-02B	Methanol Injection Pump B	0.86	0.84	400	7.5	4.84	8.93
SK-98-PM-02C	Methanol Injection Pump C	0.86	0.84	400	7.5	4.84	8.93
SK-98-PM-02D	Methanol Injection Pump D	0.86	0.84	400	7.5	4.84	8.93
SK-98-PM-02F	Methanol Injection Pump F	0.73	0.81	400	7.5	5.43	9.26
SK-00-PK-01	GTG Over Head Crane	0.86	0.84	400	5.7	3.68	6.79
SK-00-PK-02A	SGC Over Head Crane A	0.91	0.84	400	18.3	11.82	21.78
SK-00-PK-02B	SGC Over Head Crane B	0.91	0.84	400	18.3	11.82	21.78
G01A-B596-2	Enclosure Vent Fan GTG-A2	0.91	0.85	400	22.5	13.94	26.47
G01B-B596-2	Enclosure Vent Fan GTG-B2	0.91	0.85	400	22.5	13.94	26.47
Total Beban					960.1	627.15	1147.8
					5		3

DATA BEBAN-BEBAN *ESSENTIAL LV SWITCHBOARD*

No.Unit	Keterangan Alat	η	pf	V	kW	kVAR	kVA
SK-00-PK-020B	Electrical Room HVAC Package B	0.95	0.87	400	87.35	49.5	100.4
SK-00-PK-010B	Control Room HVAC Package B	0.95	0.87	400	62.15	35.22	71.43
G01A-B321	Pre/Post LO Pump GTG-A	0.77	0.8	400	1.5	1.125	1.875
G01B-B321	Pre/Post LO Pump GTG-B	0.77	0.8	400	1.5	1.125	1.875
SK-81-EM-01A	Lube Oil Cooler Fan GTG-A	0.83	0.82	400	37	25.83	45.12
SK-81-EM-01B	Lube Oil Cooler Fan GTG-B	0.83	0.82	400	37	25.83	45.12
SK-81-PM-01A	Fuel Booster Pump A	0.73	0.79	400	0.75	0.58	0.95
SK-81-PM-01B	Fuel Booster Pump B	0.73	0.79	400	0.75	0.58	0.95
G01A-B343	Primary Fuel Pump A	0.86	0.84	400	7.5	4.84	8.93
G01B-B343	Primary Fuel Pump B	0.86	0.84	400	7.5	4.84	8.93
G01A-B596-1	Enclosure Vent Fan GTG-A1	0.91	0.85	400	22.5	13.94	26.47
G01B-B596-1	Enclosure Vent Fan GTG-B1	0.91	0.85	400	22.5	13.94	26.47
G01A-B330	Starter Motor GTG-A	0.95	0.86	400	93	55.18	108.14
G01B-B330	Starter Motor GTG-B	0.95	0.86	400	93	55.18	108.14
G01A-BC520	Battery Charger GTG-A	0.9	0.8	400	37	27.75	46.25
G01B-BC520	Battery Charger GTG-B	0.9	0.8	400	37	27.75	46.25
SK-70-E-01	Fuel Gas Preheater	0.9	1	400	214	0	214
SK-71-PM-03A	Diesel Pump A	0.86	0.83	400	5.5	3.7	6.63
SK-71-PM-03B	Diasel Pump B	0.86	0.83	400	5.5	3.7	6.63
SK-75-PM-01B	LP Flare KO Drum Pump B	0.83	0.82	400	4	2.8	4.88
SK-75-PM-02B	LP Flare KO Drum Booster Pump B	0.93	0.86	400	37	21.9	43
SK-82-EL-12	Essential Lighting Panel (under pipe rack)	0.9	0.85	400	19.15	11.87	22.53
SK-81-ED-04	Essential Distribution Board	0.9	1	400	23.9	0	23.9
SK-82-ER-01	EDG 24V DC Cranking Battery Charger	1	0.95	400	0.5	0.16	0.53
SK-83-ER-01	Main AC UPS Feeder B	0.95	0.8	400	80	60	100
SK-83-ER-01	AC UPS Bypass Supply	0.95	0.8	400	80	60	100
SK-83-ER-02	110V DC UPS Feeder B	0.95	0.8	400	22	16.5	27.5
SK-81-EL-05	Lighting Panel for Control Building	0.9	0.85	400	21.7	13.45	25.53
SK-81-ED-07	Impressed Current Cathodic Protection (pipe line)	0.9	0.85	400	3	1.86	3.53
SK-85-EM-01B	Air Compressor Cooler B	0.86	0.84	400	7.5	4.84	8.93

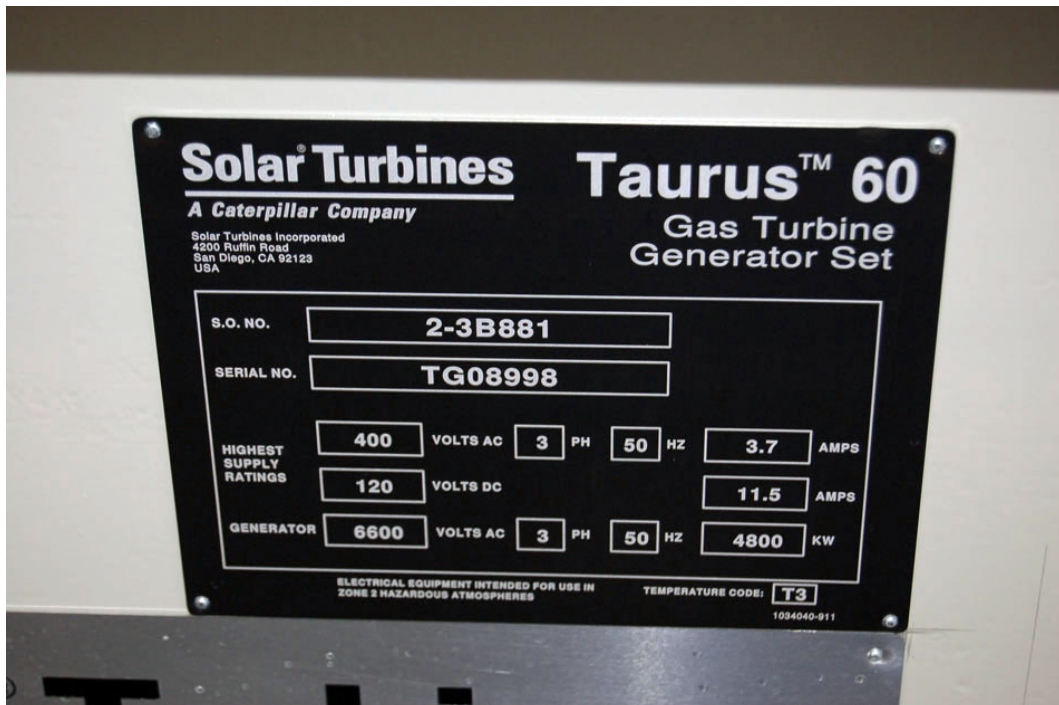
SK-85-KM-01B	Air Compressor B	0.96	0.86	400	132	78.3	153.5
SK-95-PM-03	Jockey Pump	0.87	0.85	400	7.5	4.65	8.8
Total Daya Beban					1211.25	626.94	1397.2

DATA BEBAN-BEBAN ACCOMODATIONS LV SWITCHBOARD

No.Unit	Keterangan Alat	η	pf	V	kW	kVAR	kVA
SK-82-EL-01	Lighting Panel For Accomodation Building 1A	0.90	0.85	400	85	52.68	100
SK-82-EL-02	Lighting Panel For Accomodation Building 1B	0.90	0.85	400	85	52.68	100
SK-82-EL-03	Lighting Panel For Accomodation Building 2	0.90	0.85	400	53	32.85	62.35
SK-82-EL-04	Lighting Panel For Mess, Kitchen & Stores	0.90	0.85	400	19	11.77	22.35
SK-82-EL-05	Lighting Panel For Laundry & stores Building	0.90	0.85	400	8	4.96	9.41
SK-82-EL-06	Lighting Panel For First Aid Facility Building	0.90	0.85	400	5	3.1	5.88
SK-82-EL-07	Lighting Panel For Security Post (Accomodation)	0.90	0.85	400	29	17.97	34.11
SK-82-EL-09	Lighting Panel For Hall	0.90	0.85	400	15	9.3	17.65
SK-82-EL-10	Lighting Panel For Switch Room (accomodation)	0.90	0.85	400	7	4.34	8.23
SK-82-EL-11	Lighting Panel For Recreation Room 1A	0.90	0.85	400	20	12.4	23.52
SK-81-EL-04	Lighting Panel for Security Post (main gate)	0.90	0.85	400	39	24.2	45.88
SK-81-EL-08	Lighting Panel for Administration Building	0.90	0.85	400	42	26.03	49.41
SK-82-ER-02	EDG 24V DC Cranking Battery Charger	1.00	0.95	400	1	0.33	1.05
SK-81-ED-02	Feeder for Water Treatment Package 1	0.90	0.80	400	5	3.75	6.25
SK-90-PM-01A	Deep Well Pump A	0.86	0.84	400	7.5	4.84	8.93
SK-90-PM-01B	Deep Well Pump B	0.86	0.84	400	7.5	4.84	8.93
SK-90-PM-02A	Potable Water Pump A	0.86	0.83	400	5.5	3.7	6.63
SK-90-PM-02B	Potable Water Pump B	0.86	0.83	400	5.5	3.7	6.63
Total Daya Beban					439	273.44	517.2 1



Generator Turbin Gas Taurus 60 di JOB Pertamina-Talisman Jambi Merang



Name Plat Generator Turbin Gas JOB Pertamina-Talisman Jambi Merang



Generator Turbin Gas Engine



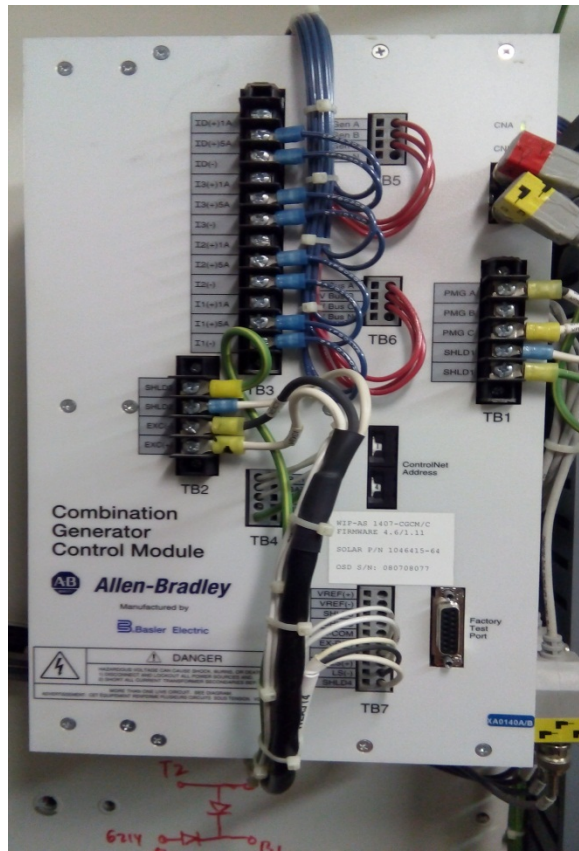
Generator Turbin Gas Engine



Panel GTG di *Room Control* Area Sungai Kenawang



Alat Ukur Panel GTG



Combination Generator Control Module