NOTES (erase after reading).

1. THIS SINGLE-LINE DIAGRAM IS APPLICABLE FOR THE CASE WHEREBY THE CHILLERS, CHILLED WATER & CONDENSER WATER PUMPS ARE LOCATED ON THE SAME LEVEL eg. ON THE ROOF.
2. REFER TO TABLE BELOW FOR TYPE OF CABLES TO BE USED :

3Ø MOTOR STARTER	NO. OF CABLES
AT ES DOL AUTO-TRANSFORMER (AT) ELECTRONIC SOFT (ES) DIRECT-ON-LINE (DOL)	3 x 1C ___mm²
SD STAR-DELTA (SD)	6 x 1C ___mm²

SPARE
SPARE
SPARE
CUBICLE HEATER
SCP/
CHILLED WATER PUMP (STANDBY) P(CHW)/ (kW)
CHILLER CW/ (kW)
CHILLED WATER PUMP (STANDBY) P(CHW)/ (kW)
CHILLER CW/ (kW)
CHILLED WATER PUMP (STANDBY) P(CHW)/ (kW)
CHILLER CW/ (kW)
CHILLED WATER PUMP (STANDBY) P(CHW)/ (kW)
TO CONTROL PANEL

2 x 1C 4mm² PVC + CPC
4 x 1C 25mm² PVC + CPC
6 x 1C 50mm² PVC + CPC
6 x 1C 50mm² PVC + CPC
6 x 1C 25mm² PVC + CPC
3 x 1C 25mm² PVC + CPC
3 x 1C 25mm² PVC + CPC
2 x 1C 00mm² PVC + CPC
3 x 1C 00mm² PVC + CPC
6 x 1C 00mm² PVC + CPC
6 x 1C 00mm² PVC + CPC
6 x 1C 00mm² PVC + CPC
3 x 1C 00mm² PVC + CPC

SD SD SD DOL ED AT SD SD SD ES

100A TPN | 100A TPN | 100A TPN | 32A SPN | 63A TPN | 100A TP | 100A TP | 63A TP | 63A TP | 63A TP | 00A 4P BUSBAR COUPLER (N/O) | 0A TPN | 0A TPN | 0A TPN | 0A SPN | _A TP | _A TP | _A TP | _A TP | _A TP

1000A

1000/5A CL. 1.0, 5VA — A 0 - 1000A — COSØ — 2A — V 0 - 500V
1000/5A CL. 5P10, 15VA — E/F O/C DTL — 2A L1 L2 L3
1000A 4P ACB — 2A L1 L2 L3

ELECTRICALLY & MECHANICALLY INTERLOCKED

000A

000/5A CL. 1.0, 5VA — A 0 - 000A — COSØ — 2A — V 0 - 500V
000/5A CL. 5P10, 15VA — E/F O/C DTL — 2A L1 L2 L3
000A 4P ACB — 2A L1 L2 L3

000/5A CL. 1.0, 5VA — A 0 - 000A — COSØ — 2A — V 0 - 500V
000/5A CL. 5P10, 15VA — E/F O/C DTL — 2A L1 L2 L3
000A 4P ACB — L1 L2 L3 2A

NOTE : (erase after reading) for situation when back-up from either essential source or other normal source is required

MCP/1-1
(LOCATED AT)
(CL = kW)
(PSCC = MVA)

BUSBAR TRUNKING C/W INTEGRAL EARTH (BY ELECTRICAL CONTRACTOR)

FROM LV MAIN SWITCHBOARD (BY ELECTRICAL CONTRACTOR)
FROM LV MAIN SWITCHBOARD (BY ELECTRICAL CONTRACTOR)
FROM LV MAIN SWITCHBOARD (BY ELECTRICAL CONTRACTOR)

TYPICAL SINGLE LINE DIAGRAM OF MAIN CONTROL PANEL

Alpha Consulting Engineers Pte Ltd

Drg No. SE(SL) – 44

Drg Title MAIN CONTROL PANEL (II)

SESLA–44.dwg