



TWEED SHIRE COUNCIL

SEWAGE PUMP STATIONS ELECTRICAL STANDARD DRAWINGS SCADAPack 357e CONTROLLER

DWG. No.	DESCRIPTION
SD-820/00	PROJECT TITLE PAGE
SD-820/01	INCOMING SUPPLY AND POWER DISTRIBUTION
SD-820/02	PUMP No1 SOFT STARTER <15.5kW POWER AND CONTROL (ATS01)
SD-820A/02	PUMP No1 SOFT STARTER >15.5kW POWER AND CONTROL (ATS48)
SD-820B/02	PUMP No1 VARIABLE FREQUENCY DRIVE >15.5kW POWER AND CONTROL (ATV630,650)
SD-820C/02	PUMP No1 VARIABLE FREQUENCY DRIVE >15.5kW POWER AND CONTROL (ATV61) – LEGACY
SD-820D/02	PUMP No1 SOFT STARTER >15.5kW, ALTISTART 22, POWER AND CONTROL – NON EXTERNAL
SD-820E/02	PUMP No1 FLYGHT CONCERTOR VSD POWER AND CONTROL – NON EXTERNAL
SD-820/03	PUMP No2 SOFT STARTER <15.5kW POWER AND CONTROL (ATS01)
SD-820A/03	PUMP No2 SOFT STARTER >15.5kW POWER AND CONTROL (ATS48)
SD-820B/03	PUMP No2 VARIABLE FREQUENCY DRIVE >15.5kW POWER AND CONTROL (ATV630,650)
SD-820C/03	PUMP No2 VARIABLE FREQUENCY DRIVE >15.5kW POWER AND CONTROL (ATV61) – LEGACY
SD-820D/03	PUMP No2 SOFT STARTER >15.5kW, ALTISTART 22, POWER AND CONTROL – NON EXTERNAL
SD-820E/03	PUMP No2 FLYGHT CONCERTOR VSD POWER AND CONTROL – NON EXTERNAL
SD-820/04	RESERVED FOR FUTURE USE
SD-820/05	BACK-UP CONTROLLER, TELEMETRY & ELV SUPPLY
SD-820/06	SCADAPack 357e RTU CONTROLLER DIGITAL INPUT SCHEMATIC
SD-820/07	SCADAPack 357e RTU CONTROLLER COMMUNICATION & DIGITAL I/O SCHEMATIC
SD-820/08	SCADAPack 357e RTU CONTROLLER ANALOG I/O SCHEMATIC
SD-820/09	SCADAPack 357e RTU GA & TERMINAL ARRANGEMENT
SD-820/10	INSTRUMENTATION ULTRASONIC LEVEL SENSOR & GENERIC FLOW METER
SD-820/10A	INSTRUMENTATION PRESSURE LEVEL SENSOR & GENERIC FLOW METER
SD-820/11	MODBUS & COMMUNICATION CONNECTIONS & GA
SD-820/12	PROPRIETARY MOTOR PROTECTION UNITS (SPARE)
SD-820A/12	PROPRIETARY MOTOR PROTECTION UNITS FLYGT MiniCAS II
SD-820B/12	PROPRIETARY MOTOR PROTECTION UNITS FLYGT MAS 711
SD-820C/12	PROPRIETARY MOTOR PROTECTION UNITS GRUNDFOS IO 113
SD-820F/12	PROPRIETARY MOTOR PROTECTION UNITS SULZER CA 462
SD-820/13	SWITCHBOARD GA & EQUIPMENT LIST – SINGLE DOOR < 15.5kW (ATS01)
SD-820A/13	SWITCHBOARD GA & EQUIPMENT LIST – DOUBLE DOOR > 15.5kW (ATS48)
SD-820B/13	SWITCHBOARD GA & EQUIPMENT LIST – BUILDING > 15.5kW (ATS OR ATV)
SD-820C/13	SWITCHBOARD GA & EQUIPMENT LIST – DOUBLE DOOR > 15.5kW (ATS OR ATV)
SD-820E/13	SWITCHBOARD GA & EQUIPMENT LIST – SINGLE DOOR (CONCERTOR) – NON EXTERNAL
SD-820/14	SWITCHBOARD CABINET DETAILS – SINGLE DOOR < 15.5kW (ATS01) SHEET 1 OF 3
SD-820A/14	SWITCHBOARD CABINET DETAILS – DOUBLE DOOR > 15.5kW (ATS OR ATV) SHEET 1 OF 3
SD-820B/14	SWITCHBOARD CABINET DETAILS – BUILDING > 15.5kW (ATS OR ATV) SHEET 1 OF 3
SD-820/15	SWITCHBOARD CABINET DETAILS SHEET 2 OF 3
SD-820/16	SWITCHBOARD CABINET DETAILS SHEET 3 OF 3
SD-820/17	TERMINAL ARRANGEMENT AND CONTROL GA
SD-820/18	RESERVED FOR FUTURE USE
SD-820/19	MHL DOSING – POWER AND CONTROL

NOTE:
WHERE MULTIPLE SELECTIONS EXIST (EG: 820A, B, C, D, E)
SELECT THE APPROPRIATE DRAWING FOR INSTALLED HARDWARE

ELECTRICAL CABLE INSULATION COLOUR CODE			
TYPE.	DESCRIPTION	CABLE COLOUR	TERMINAL COLOUR
AC POWER	A PHASE	RED	GREY
	B PHASE	WHITE	GREY
	C PHASE	BLUE	GREY
	NEUTRAL	BLACK	BLACK
	ACTIVE CONTROLLED BY LOCAL ISOLATOR	PER PHASE (RWB)	GREY
240V AC CONTROL	NEUTRAL	BLACK	BLACK
	ACTIVE CONTROLLED BY REMOTE ISOLATOR	PURPLE	GREY
240V AC CONTROL	NEUTRAL	BLACK	BLACK
	POSITIVE	WHITE/BROWN	WHITE
12V DC CONTROL	NEGATIVE	WHITE/BLUE	BLUE
	POSITIVE	WHITE/RED	RED
24V DC CONTROL	NEGATIVE	WHITE/BLUE	BLUE
	POSITIVE	WHITE	GREY
SCREENED ANALOG	NEGATIVE	BLACK	GREY
	SCREEN	GREEN	GREY
	COMMON	BROWN	GREY
NO VOLT CONTACTS	SWITCHED	BROWN/WHITE	GREY

ALL ELECTRICAL WORKS ARE TO COMPLY TO TSC
STANDARD ELECTRICAL SPECIFICATIONS EL00 TO EL21

ISSUE	AMENDMENT DETAILS	Drawn	Checked	Approved	Date
01	AMENDED ISSUE RELEASED FOR PUBLICATION	E.K	P.B	D.F	13.08.13
02	AMENDED DRAWING No's & ADDED SD-820C/12 & SD-820C/13	E.K	P.B	D.F	27.04.15
03	ALTISTART 22 ADDED TO STANDARD DRAWINGS	M.T.	E.K.	J.G	01.03.16
04	ALTISTART 22 RESET ADDED TO STANDARD DRAWINGS	T.C	P.B	J.G	30.05.17
05	CONCERTOR DRAWING ADDED, PUMP 3 REMOVED	C.N	P.B	J.G	02.07.18
06	UPDATED DRAWING LIST, PRESSURE SENSOR ADDED, NAME CHANG	P.B	M.G	D.F	18.02.19
07	UPDATED DRAWING LIST, SULZER, DRAWING NAMES	P.B	D.R	J.G	20.08.20



ELECTRICAL UNIT

COUNCIL OFFICES
ALTONA ROAD,
CUDDGEN NSW 2487.
PHONE 02 66740342
FAX 02 66741069
WEBSITE www.tweed.nsw.gov.au

DESIGNED:	
DRAWN:	
APPROVED:	
SCALE	NTS
ACAD FILE No.:	

PROJECT:	SEWAGE PUMP STATIONS ELECTRICAL STANDARD DRAWINGS	DRAWING NUMBER: SD-820/00
PLAN TITLE:	PROJECT TITLE PAGE	SHEET 00 OF 19
		REV 07
		DATE 20/08/2020