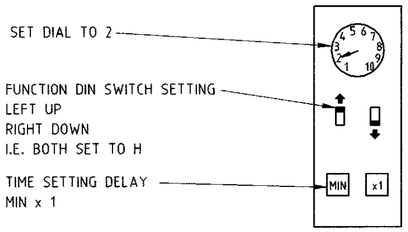
DIMENSIONS IN MILLIMETRES | DO NOT SCALE | REMOVE ALL BURRS AND SHARP EDGES | TOLERANCES ON MACHINING DIMENSIONS (UNLESS OTHERWISE NOTED) 0 TO 500 ± 0.5 , 500 TO 1000 ±1

FILENAME : 33115.dwg
PLOT VIEWS : ALL BUT 0

LOCO ENGINE SPEED		
THROTTLE NOTCH	R.P.M.	SOLENOID ENERGISED
LOW IDLE	255 ± 4	A D
IDLE	318 ± 4	NONE
1	318 ± 4	NONE
2	388 ± 15	A
3	497 ± 15	C
4	570 ± 4	A C
5	655 ± 15	B C D
6	730 ± 4	A B C D
7	829 ± 15	B C
8	904 ± 4	A B C
DYN. BRAKE	600 ± 5	B



TIMER STEPS WALKWAY TSW SETTING DETAILS

FOR PHYSICAL CIRCUIT DIAGRAM REFER SECTION IV C9

NOTE

FOR LOCOMOTIVES 2170-2179 & 2180.

SETTING CHART

	DEVICE	FUNCTION	TEST CONDITIONS	ADJUST AT	SETTINGS	REMARKS
MISCELLANEOUS	TDS	SANDING CONTROL	WS11 TEST SWITCH	NONE	3-5 SECONDS	DELAY ON D.O.
	VR	AUX. GEN. VOLT REG.	THROTTLE No. 8	VR	74 ± 0.5V	MEASURE AT VR TEST PTS 1 TO 14
	BCP	BR. CYL. PRESS. SW.		BCP	27.5 kPa P.U. 7 kPa D.O.	
	COP	COMP. OIL PRESSURE		DEVICE	PRESET	OPEN AT 103.4 kPa CLOSE AT 69 kPa
	DPC	DYN. PNEUM. SW.		DEVICE	386 kPa P.U. 310 kPA D.O.	
	ESS	EMERG. SAND SW.		DEVICE	241 kPa P.U. 138 kPa D.O.	
	ETS	ENG. TEMP. ALARM		DEVICE	PRESET	208°F P.U. 190°F D.O.
		HEADLIGHT BRIGHT		8Ω HDLT. RES. SLIDE	28V. BRIGHT	MEASURE WITH ENGINE RUNNING
		HEADLIGHT DIM		5Ω HDLT. RES. SLIDE	16V. DIM	MEASURE WITH ENGINE RUNNING
	SI	SPEED INDICATOR LTS.		R27A	12V MAX.	VOLTAGE MEASURED AT LAMP
	TA	ENGINE TEMP.		DEVICE	PRESET	155°F P.U. 140°F D.O. No.1 FAN
	TB	ENGINE TEMP.		DEVICE	PRESET	171°F P.U. 156°F D.O. No.2 FAN
	CCS	COMP. CONT. SW.		DEVICE	758 kPa 655 kPA	
	R10	EMERG. VOLTAGE REGULATION		DEVICE	56.7Ω	SEE NOTE
	MRSW	MAIN RESERVOIR SW.			690 kPa P.U. 540 kPa D.O.	
EXCITATION CONTROL	TH13	FIRST THROTTLE CURRENT	BRAKES SET THROTTLE No.1	NONE	275 ± 75A	No. 2 MOTOR
	TH13	THROTTLE RESPONSE	THROTTLE ONE	NONE	12.5V	OPEN GEN. FLD. CB TEST SW IN CIRCUIT CHECK ALL VOLTAGES ±1V MEASURE VOLTAGE FROM TH13 TEST PT3 TO RC11 TEST PT14
			THROTTLE TWO	NONE	22.5V	
			THROTTLE THREE	NONE	31.2V	
			THROTTLE FOUR	NONE	43.0V	
			THROTTLE FIVE	NONE	51.2V	
			THROTTLE SIX	NONE	57.3V	
			THROTTLE SEVEN	NONE	63.2V	
			THROTTLE EIGHT	NONE	68.0V	
	RC11	RATE CONTROL	8TH THROTTLE POWER	NONE	50 ± 0.5V	AT RC No.13
			8TH THROTTLE BRAKE		49.6 ± 1.5V	
	GV12	VOLTAGE LIMIT REGULATION	8TH THROTTLE POWER GRID LOAD 1.2Ω MIN.	NONE	1050 ± 20V	
	ARL	AUTOMATIC GR RESET LIMITER		RH36	600 ± 5V	AT TP3 & TP4
	EL11	EXCITATION LIMIT PROTECTION	MAIN GEN. SHORT CKT MEAS. GEN FLD. CURRENT	NONE	154 ± 3A	SHORT CIRC. GX2 MODULE TP4 & TP8
	GX2	EXCITATION LIMIT REGULATION	MAIN GEN. SHORT CKT MEAS. GEN FLD. CURRENT	NONE	144 ± 3A	SHORT CIRC. EL11 MODULE TP5 & TP6

SETTING CHART

	DEVICE	FUNCTION	TEST CONDITIONS	ADJUST AT	SETTINGS	REMARKS
DYNAMIC BRAKE	DR11	GRID CURRENT LIMIT	OPERATION ABOVE 48 km/h	NONE	370 +10 -15 A	
	DP11	GRID CURRENT PROTECTION	ABOVE 48 km/h WITH DR REMOVED	NONE	410 ± 10A	DROP-OUT 352 ± 20A
	DP11	T.M. FIELD PROTECTION	AR10 OPEN CIRCUIT DYN. BRK. SET UP	NONE	80 ± 4V	DROP-OUT 32 ± 5V
	OCP	OPEN CIRCUIT PROTECTION		NONE	550 ± 50V	RESET AT OCP RESET BUTTON
	IPS	FLAT WHEEL PROTECTION		DEVICE	103 kPa	DROPS OUT DC CONTACTORS
ALERTING SYSTEM	BCPS	BRAKE CYLINDER PRESSURE SWITCH			CLOSE AT 207±10 kPa RISING	REFER DWG. A2-33224
	DBPS	DRIVER'S BRAKE PRESSURE SWITCH			CLOSE AT 500±10 kPa RISING	REFER DWG. A2-33224
	MRPS	MAIN RESERVOIR PRESSURE SWITCH			CLOSE AT 500±10 kPa FALLING	REFER DWG. A2-33224
	PKS	PWR KNOCKOUT SW.			414 kPa P.U. 310 kPa D.O.	

NOTE:- FOR ORIGINAL DRAWING REFER Q.R. DWG No. DEW130

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ITEM	DESCRIPTION	ORDERING SIZE	QTY PER ASSY	SPECIFICATION

MRE W. THOMAS per

QUEENSLAND RAILWAYS
OFFICE OF THE MANAGER, ROLLINGSTOCK ENGINEERING

DIESEL LOCOS 2170-2180 (EXTENDED CAB) PHYSICAL CIRCUIT DIAGRAM-SETTING CHART GL26C-2 SECTION VIII

SCALE	———
DRAWN	A BOYD
CHECKED	19981116
APPROVED	JCR
DATE	16.11.98
REF.	A2-33115
REV.	

ASSY. DRG. | USED ON | CORRESP. | CHKD. | INIT'LS | DATE | ALTERATION | REV.