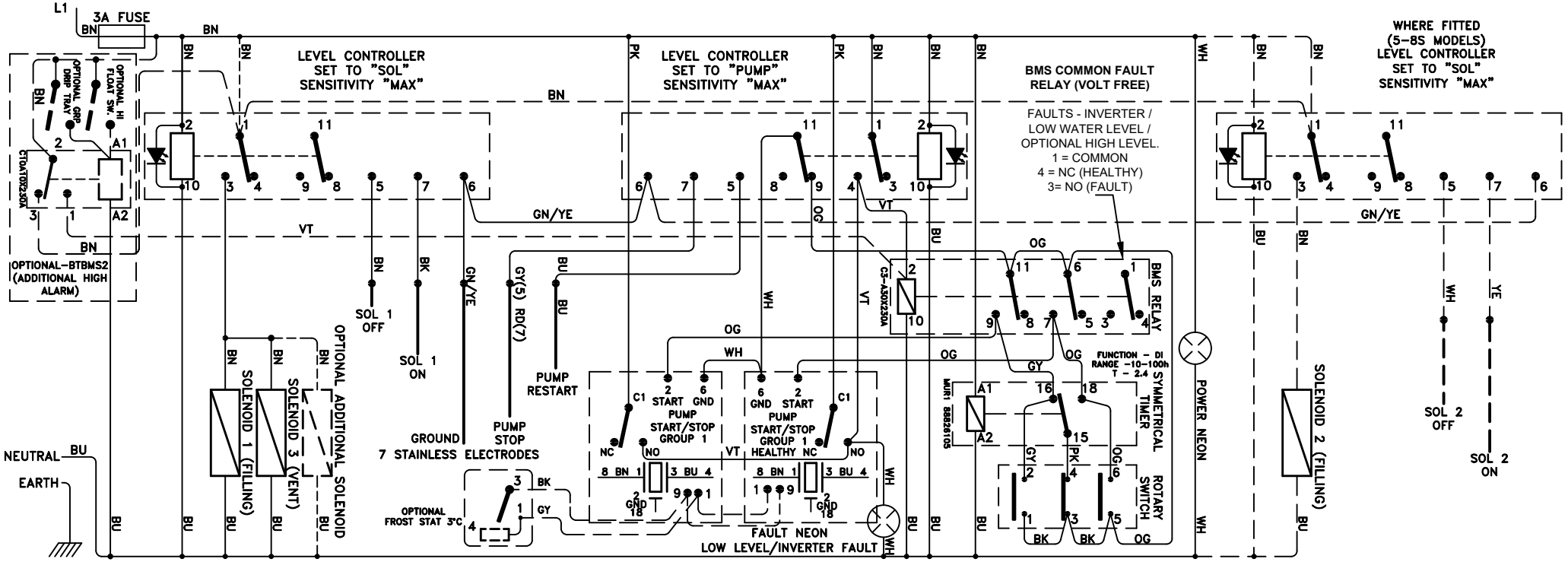
TESTED BY
DATE



OPERATION – BT WIRING DIAGRAM VAR SPEED DUTY STANDBY 1 OR 2 FILLING SOLENOIDS

CISTERN FILLING IS VIA NORMALLY CLOSED SOLENOID VALVES CONTROLLED BY "SOL 1" AND "SOL 2" (WHERE FITTED) LEVEL CONTROLLERS. THE LED ILLUMINATES WHEN THE SOLENOID IS POWERED. SOLENOID 1 OPENS ONCE THE WATER HAS DROPPED BELOW THE "SOL 1 ON" ELECTRODE AND CLOSES ONCE THE "SOL 1 OFF" ELECTRODE IS SUBMERGED. WHERE FITTED – IF SOLENOID 1 CANNOT MEET THE DEMAND SOLENOID 2 OPENS ONCE THE WATER HAS DROPPED TO "SOL 2 ON" LEVEL.

ONLY ONE PUMP WILL RUN AT ANY ONE TIME. IN "AUTO" MODE THE PUMPS ALTERNATE EVERY 24 HOURS (SWAP AT NO SPECIFIED TIME). IF ROTARY SWITCH SET TO "HAND" LEFT OR RIGHT PUMP WILL RUN UPON DEMAND. IF AN INVERTER OR TRANSDUCER FAULT OCCURS, THE BMS RELAY ACTIVATES AND FORCES THE HEALTHY PUMP TO RUN UPON DEMAND.

THE PUMPS ARE CONTROLLED BY PRESSURE TRANSDUCERS AND LOW LEVEL "PUMP" CONTROLLER. THE "PUMP" CONTROLLER CUTS POWER TO THE PUMPS IF THE CISTERN IS ALMOST EMPTY. THE LED IS ILLUMINATED UNTIL THE "PUMP STOP" ELECTRODE IS EXPOSED – THE PUMP STOPS. THE PUMP RESTARTS ONCE THE "PUMP RESTART" ELECTRODE IS SUBMERGED. ONCE THE PRESSURE VESSEL IS RECHARGED AND NO FLOW IS DETECTED, THE PUMPS RUNS SLOW FOR A PERIOD THEN STOPS. GO TO arrowvalves.co.uk FOR FAULT FINDING CHART.

Arrow Valves

T. 01442 823123
arrowvalves.co.uk
AM135F 02/11/21

ARROW VALVES LTD
YORK HOUSE
NORTHBRIDGE ROAD
BERKHAMSTED
HERTS HP4 1TA
Tel: 01442 823 123
email: technical@arrowvalves.co.uk
web: www.arrowvalves.co.uk

TITLE: BT WIRING DIAGRAM DUTY STANDBY SINGLE PHASE			
DRN: AL	CHECKED BY:	DATE:	©2026

This drawing is the property of Arrow Valves Ltd and must not be copied without prior written permission

MATERIAL: CARD 160 g/sqm	
FINISH: LAMINATED	SCALE: 100%
DRG No: AM135H	DATE: 19/02/25