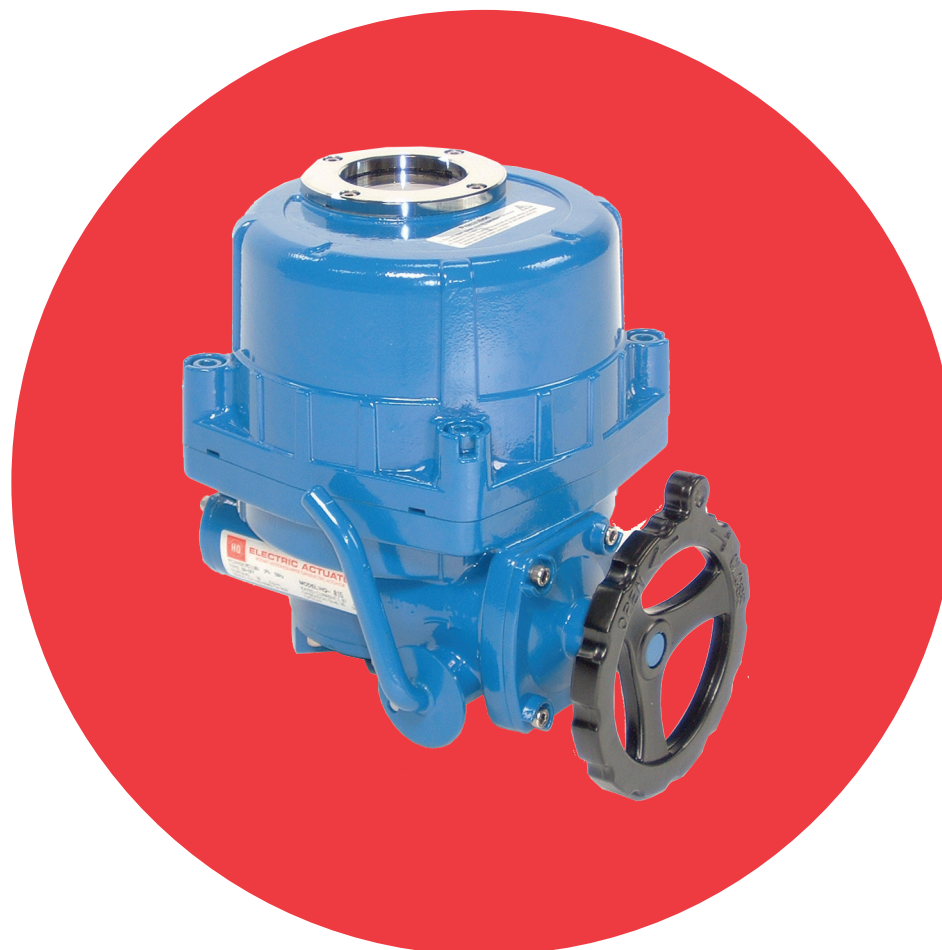
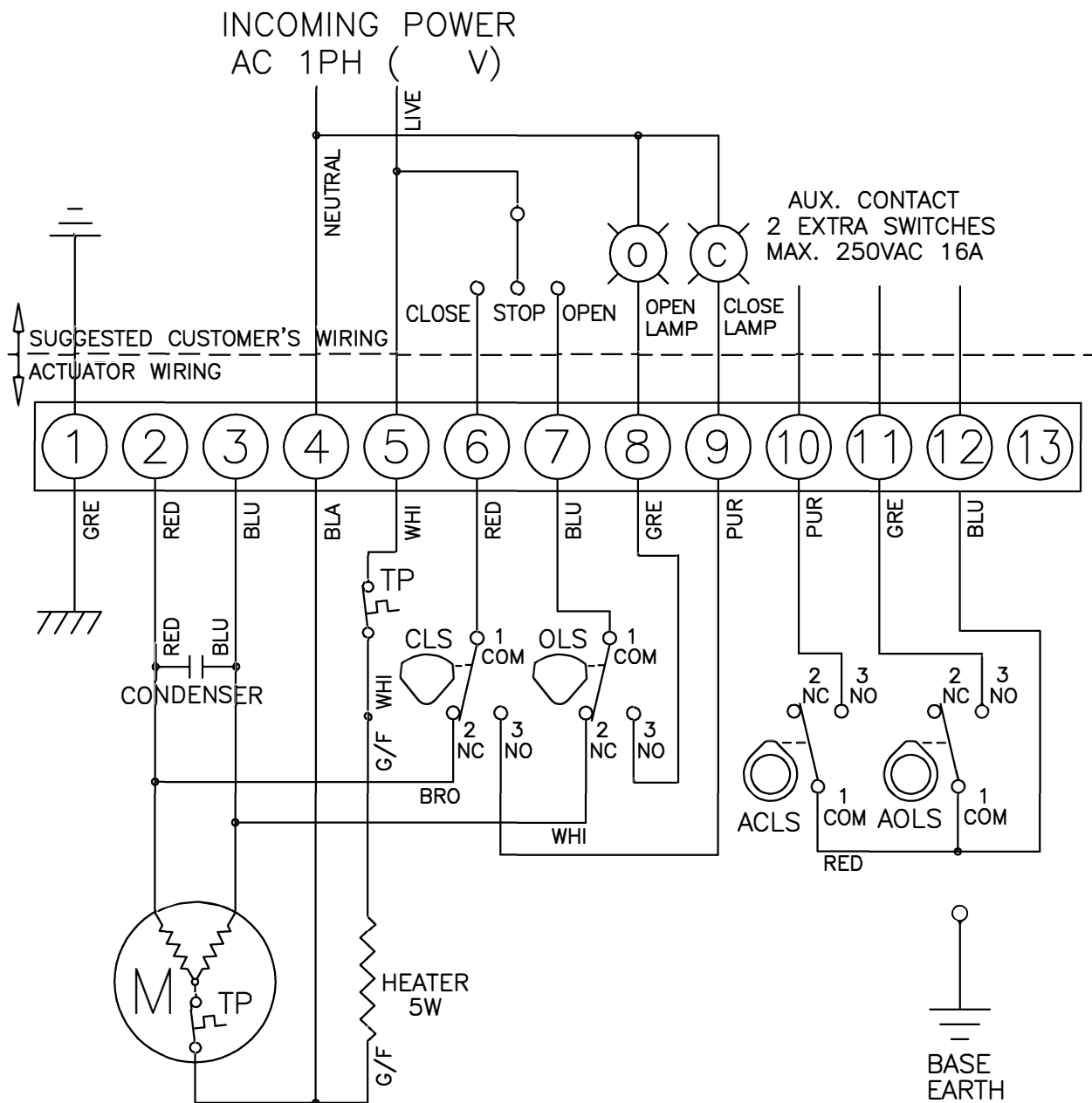


Wiring Diagrams



HQ8 **HQ Series 1/4 Turn** **Electric Actuator**

Albion Valves (UK) Ltd
www.albionvalvesuk.com
Email: sales@albionvalvesuk.com
Tel: 01226 729900

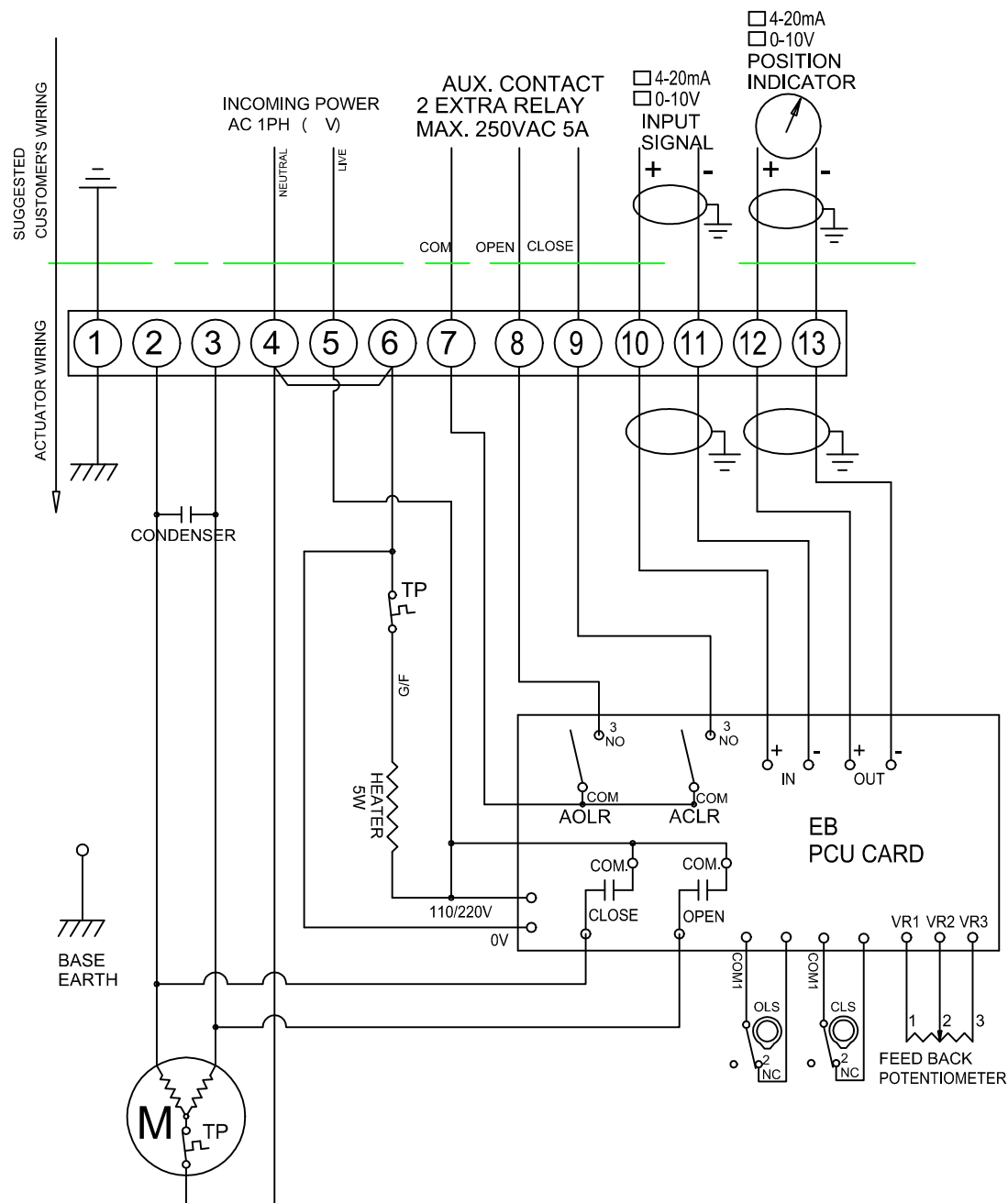


TORQUE AND LIMIT SWITCH OPERATION		
SWITCH	CLOSE ←	INTERMEDIATE → OPEN
CLS 1-2		
CLS 1-3		
OLS 1-2		
OLS 1-3		
ACLS1-2		
ACLS1-3		
AOLS1-2		
AOLS1-3		

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

1 PHASE WIRING DIAGRAM STANDARD	
DWG. NO HQ-1200-A	
DATE 20/12/2003	ISSUE REF: A
HQ-008	Albion Valves (UK) Ltd
APPLICATION	01226 729900



TORQUE AND LIMIT SWITCH OPERATION			
SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
TP	THERMAL PROTECTOR	250VAC 15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

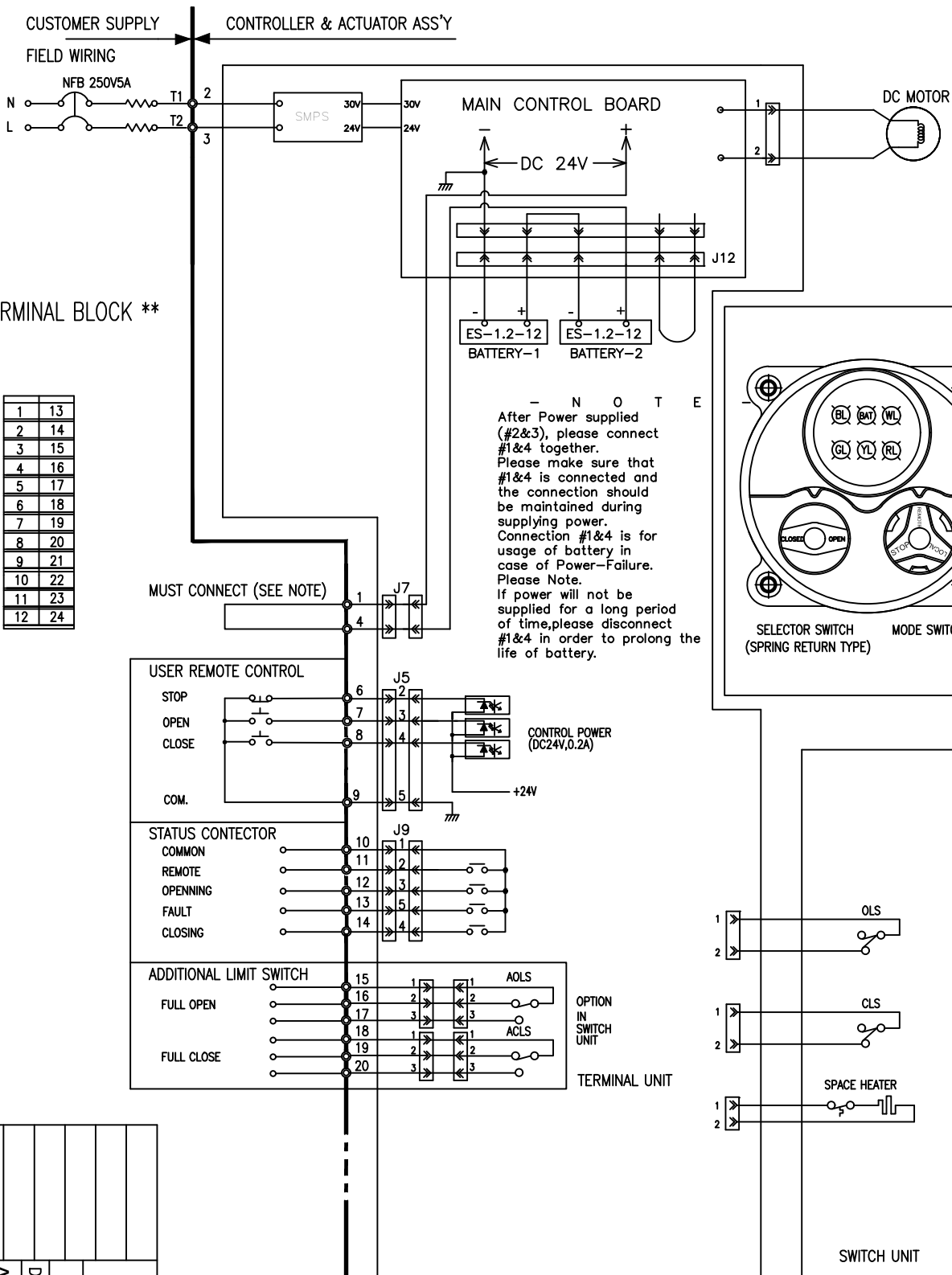
	PART NAME		1PH WIRING DIAGRAM STANDARD+PCU
	DWG. NO		HQ-1500-E
	DATE	22/11/18	ISSUE REF: E
HQ-008	Albion Valves (UK) Ltd 01226 729900		
APPLICATION			

DOC : WD-01 1-09-2008

**** TERMINAL BLOCK ****

1	13
2	14
3	15
4	16
5	17
6	18
7	19
8	20
9	21
10	22
11	23
12	24

N
L



**** NOTE ****
Technical Explanation

OLS : OPEN LIMIT SWITCH
CLS : CLOSE LIMIT SWITCH

RL : RED LAMP FOR OPEN
GL : GREEN LAMP FOR CLOSE
YL : YELLOW LAMP FOR FAULT
◎ : MARKS FOR TERMINAL

BAT : BATTERY LAMP MODE
GL : GREEN LAMP FULL RECHARGE
BL : BLUE LAMP MID RECHARGE
RL : RED LAMP LOW RECHARGE

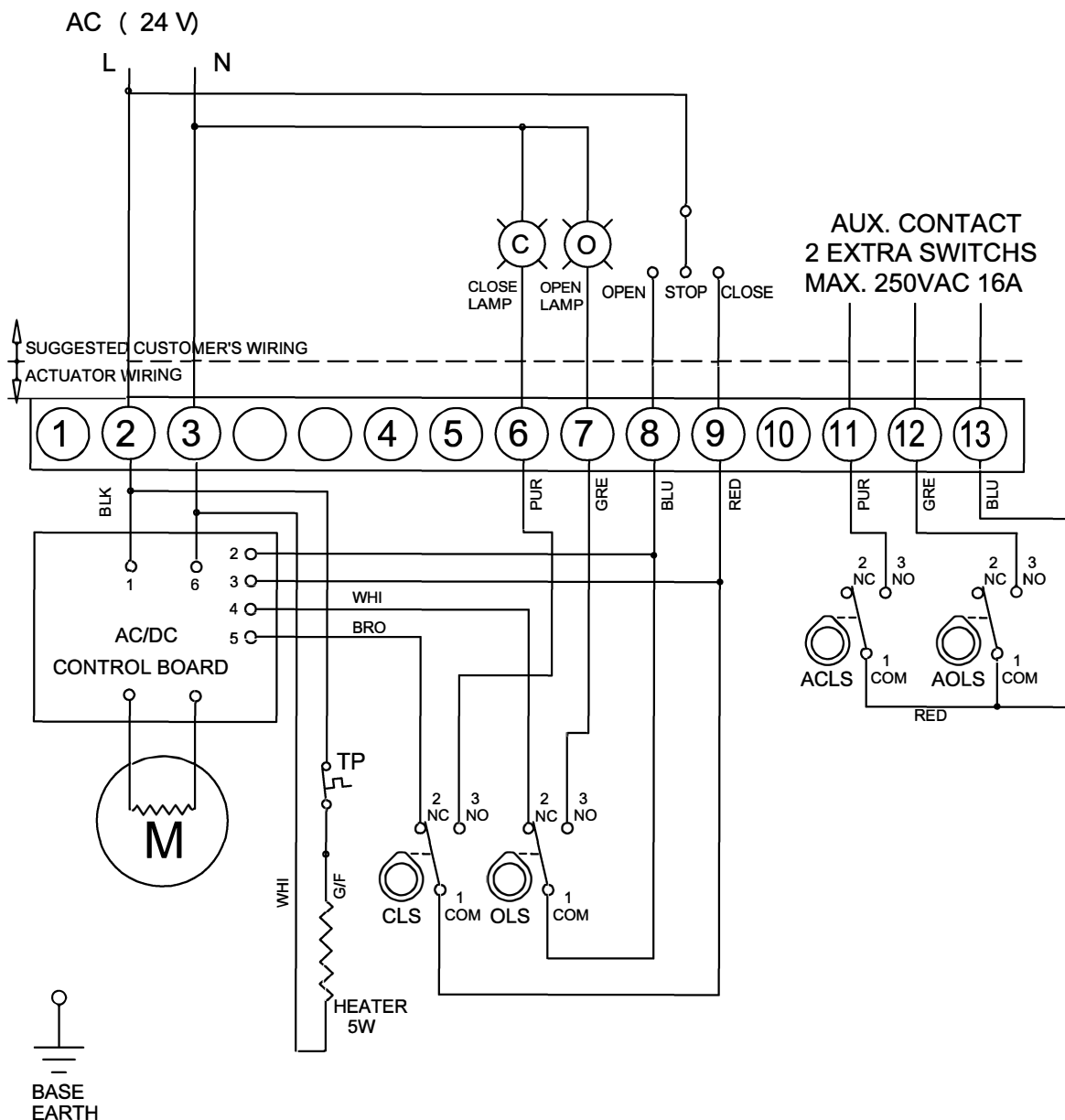
WL : WHITE LAMP FOR POWER
BL : BLUE LAMP FOR REMOTE

**** LIMIT SWITCH CONTACT POSITIONS ****

ROTOR	CON-TACT	VALVE OPENING (%)
		0
		100
OPEN (OLS)	1-3	
	1-2	
CLOSE (CLS)	1-3	
	1-2	

— : CONTACT ON --- : CONTACT OFF

APPLICATION	HQ-008	DATE 16.10.2014	ISSUE E	DWG. NO HQ - 9600-E	1 PHASE WIRING DIAGRAM + RBP + ALS
Albion Valves (UK) Ltd 01226 729900					
DOC : WD-01 1-09-2008					



TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS1-2			
ACLS1-3			
AOLS1-2			
AOLS1-3			

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

PART NAME AC WIRING DIAGRAM
STANDARD

DWG. NO HQ-7420-A

DATE 2006.06.02 ISSUE REF: A

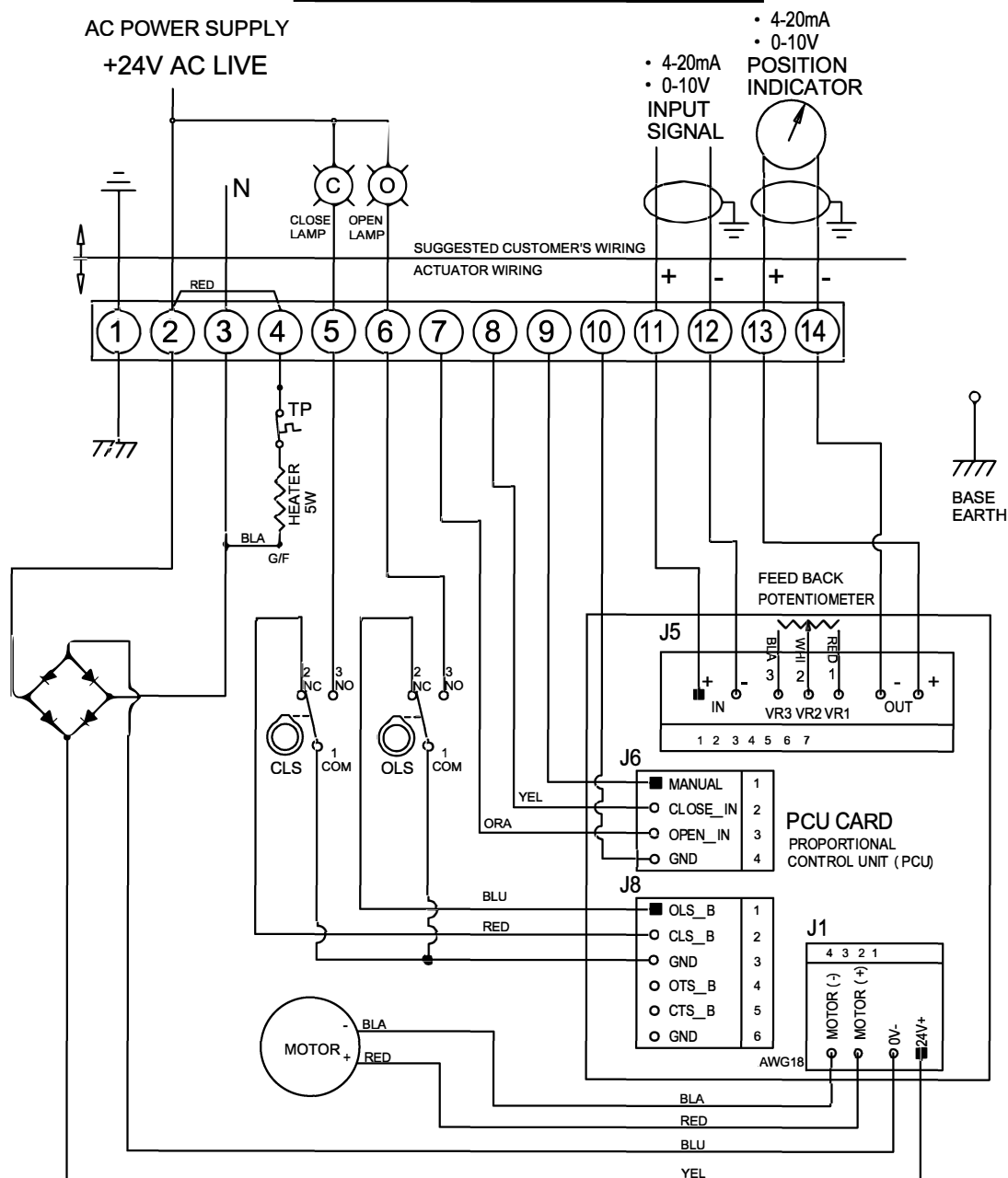
HQ-008
APPLICATION Albion Valves (UK) Ltd
01226 729900

DOC : WD-01 1-09-2008



HQ8 24V AC & Proportional Control Unit

POWER & SIGNAL MUST BE ISOLATED
(COMMON 0v BETWEEN POWER & SIGNAL WILL DAMAGE THE PCU CARD)

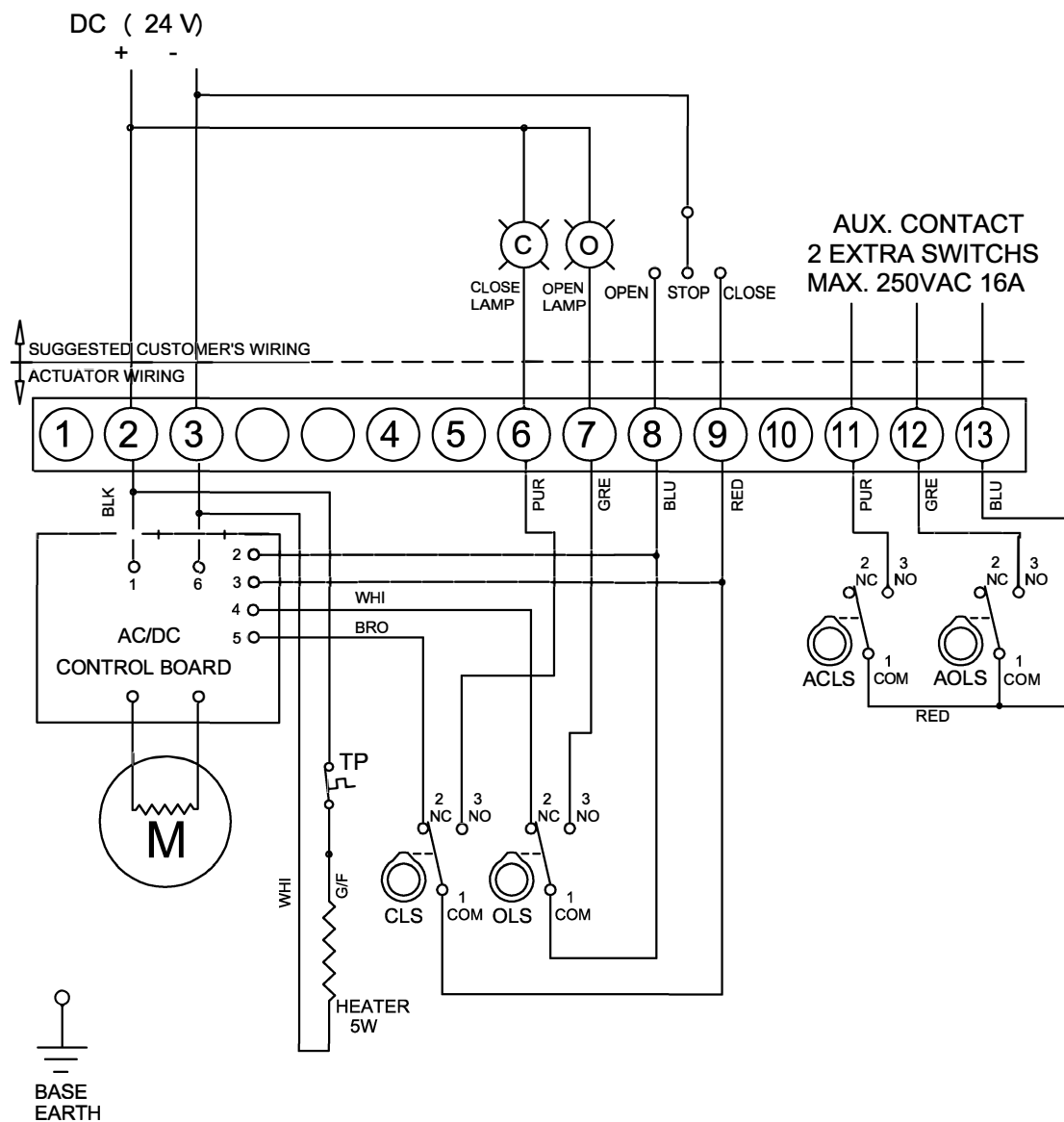


TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS1-2			
ACLS1-3			
AOLS1-2			
AOLS1-3			
SYMBOL	DESCRIPTION		RATING
CLS	CLOSE LIMIT SWITCH		250VAC 10A
OLS	OPEN LIMIT SWITCH		250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH		250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH		250VAC 16A
TP	THERMAL PROTECTOR		250VAC 15A
■	FIRST PIN		

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

	PART NAME		WIRING DIAGRAM	
			AC + PCU	
	DWG. NO		HQ-8500-AC-A	
	DATE		21.8.2020	ISSUE REF: A
	Albion Valves (UK) Ltd 01226 729900			
HQ-008				
APPLICATION				
DOC : WD-01 1-09-2008				



TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS1-2			
ACLS1-3			
AOLS1-2			
AOLS1-3			

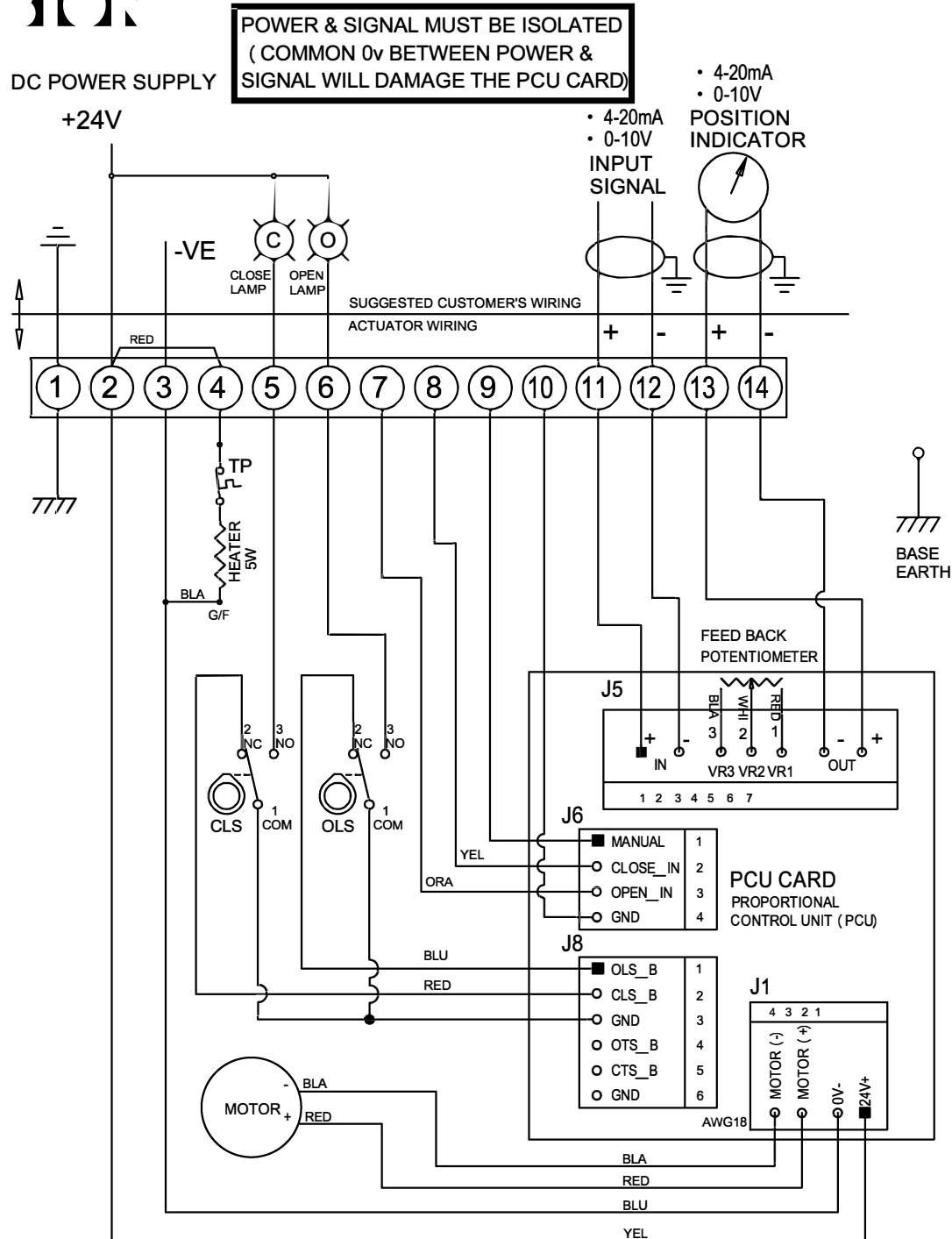
SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

	PART NAME		DC WIRING DIAGRAM STANDARD	
	DWG. NO		HQ-8420-A	
	DATE 2006.06.02		ISSUE REF: A	
	Albion Valves (UK) Ltd 01226 729900			
HQ-008				
APPLICATION				
DOC : WD-01 1-09-2008				



HQ8 24V DC & Proportional Control Unit



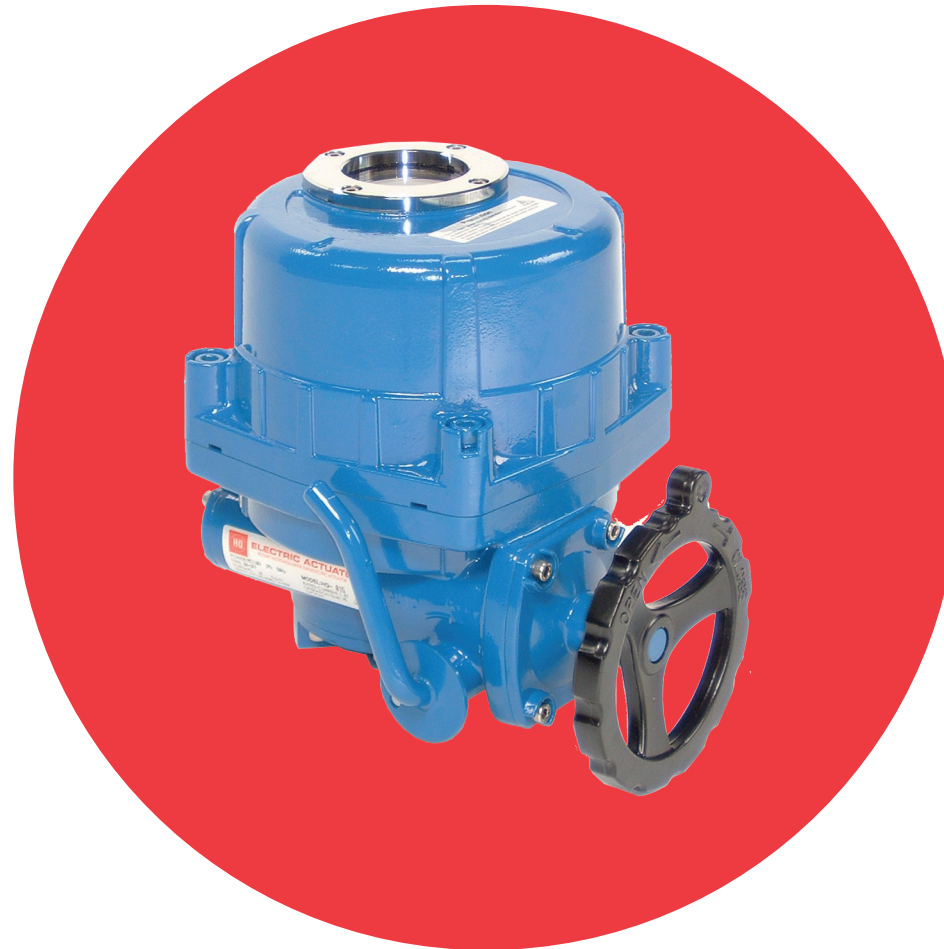
TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE	INTERMEDIATE	OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS1-2			
ACLS1-3			
AOLS1-2			
AOLS1-3			
SYMBOL	DESCRIPTION	RATING	
CLS	CLOSE LIMIT SWITCH	250VAC 10A	
OLS	OPEN LIMIT SWITCH	250VAC 10A	
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A	
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A	
TP	THERMAL PROTECTOR	250VAC 15A	
■	FIRST PIN		

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

	PART NAME		WIRING DIAGRAM DC + PCU	
	DWG. NO		HQ-8500-DC-A	
	DATE	21.8.2020	ISSUE REF:	A
	Albion Valves (UK) Ltd 01226 729900			
HQ-008				
APPLICATION				
DOC : WD-01 1-09-2008				

Wiring Diagrams

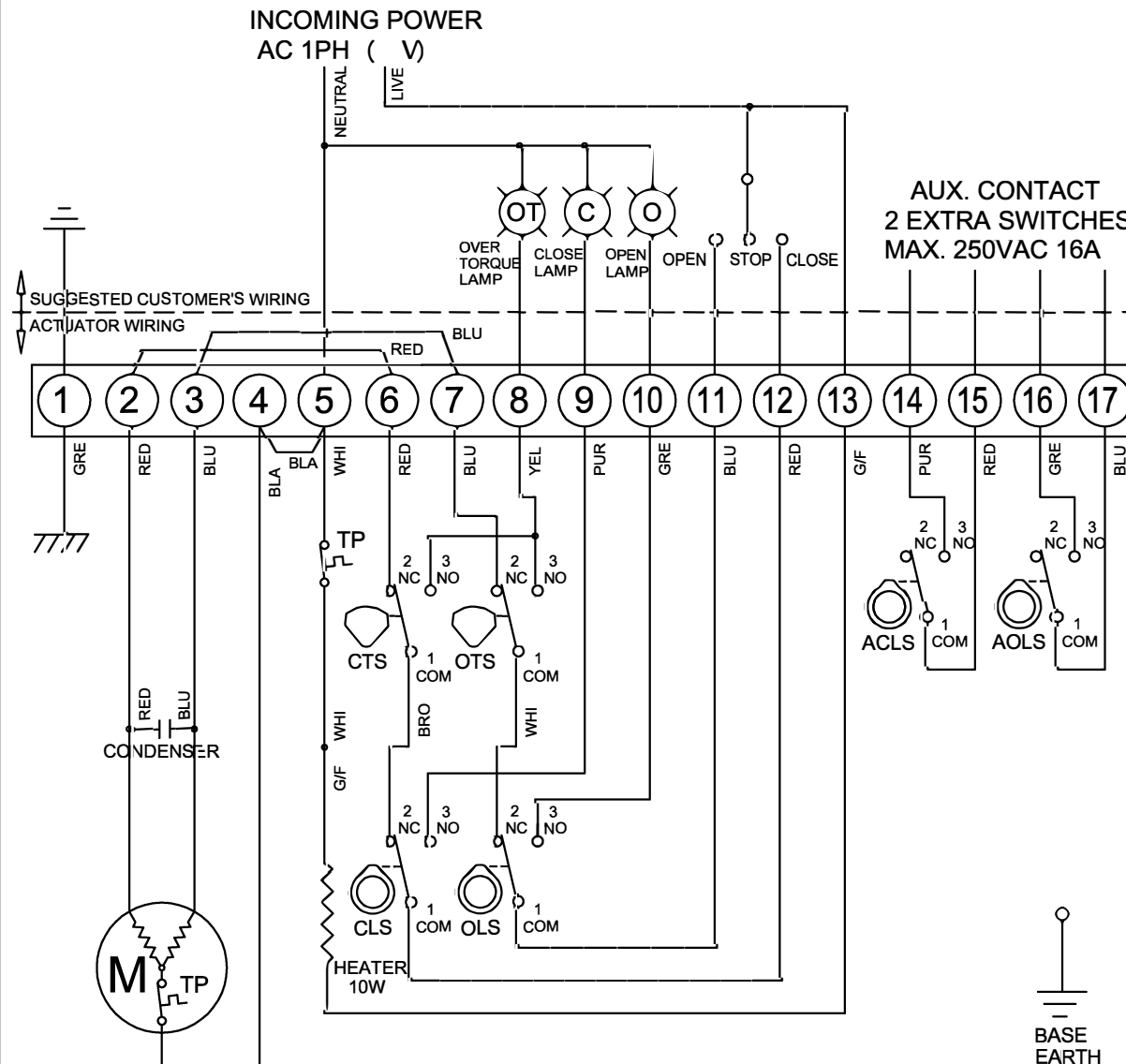


HQ15 - HQ120 HQ Series 1/4 Turn Electric Actuator

Albion Valves (UK) Ltd
www.albionvalvesuk.com
Email: sales@albionvalvesuk.com
Tel: 01226 729900



HQ15 - HQ120 110V 230V



TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS1-2			
ACLS1-3			
AOLS1-2			
AOLS1-3			
CTS 1-3	* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		
OTS 1-3	* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE		
SYMBOL	DESCRIPTION		RATING
CLS	CLOSE LIMIT SWITCH		250VAC 10A
OLS	OPEN LIMIT SWITCH		250VAC 10A
CTS	CLOSE TORQUE SWITCH		250VAC 10A
OTS	OPEN TORQUE SWITCH		250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH		250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH		250VAC 16A
TP	THERMAL PROTECTOR		250VAC 15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

1 PHASE WIRING DIAGRAM STANDARD

HQ-120

HQ-080

HQ-060

HQ-050

HQ-030

HQ-020

HQ-015

APPLICATION

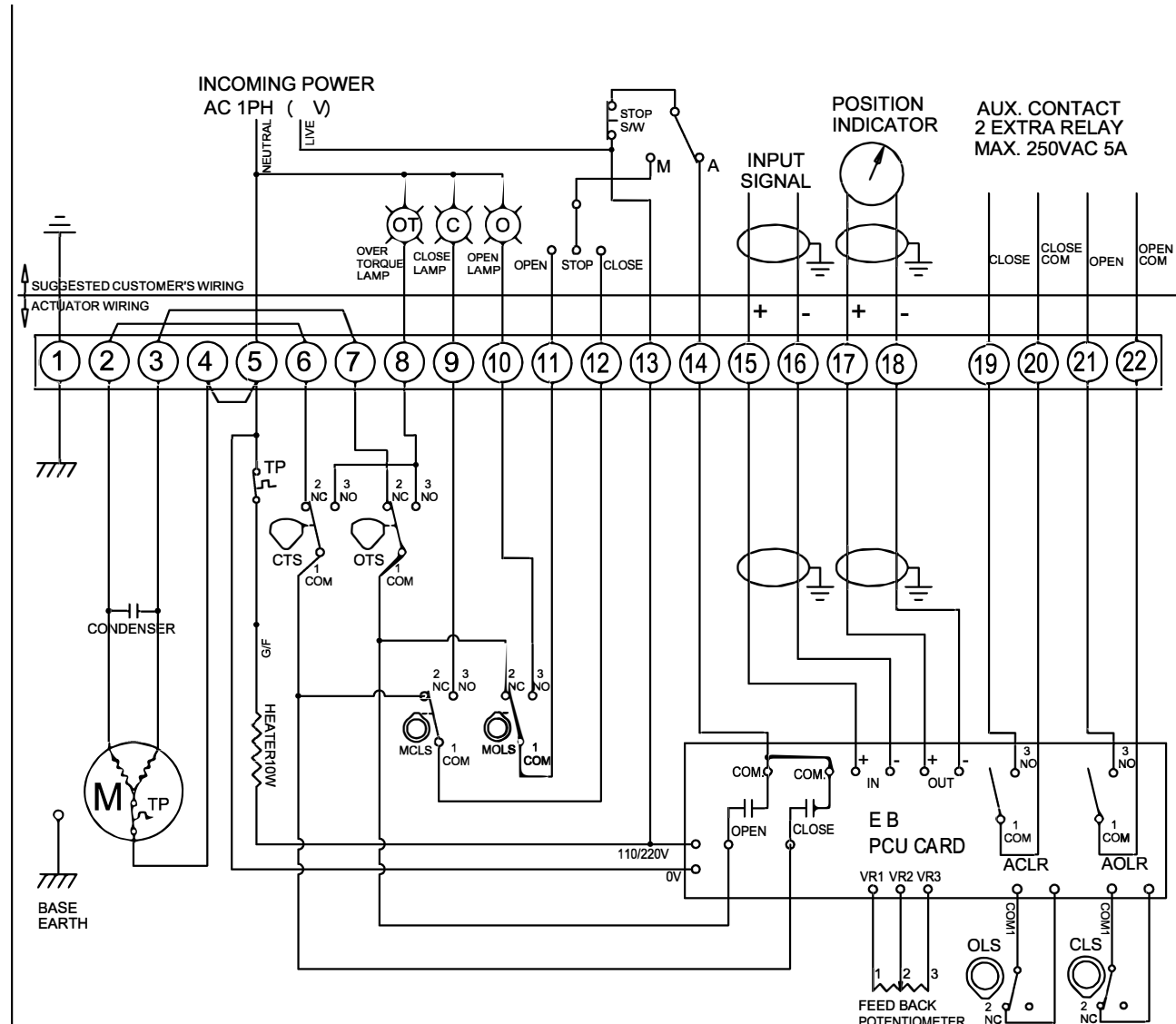
DWG. NO HQ-11000-A

DATE 10/5/2001 ISSUE REF: A

Albion Valves (UK) Ltd
01226 729900

DOC : WD-01 1-09-2008

HQ15 - HQ120 110V 230V & Proportional Control Unit



TORQUE AND LIMIT SWITCH OPERATION

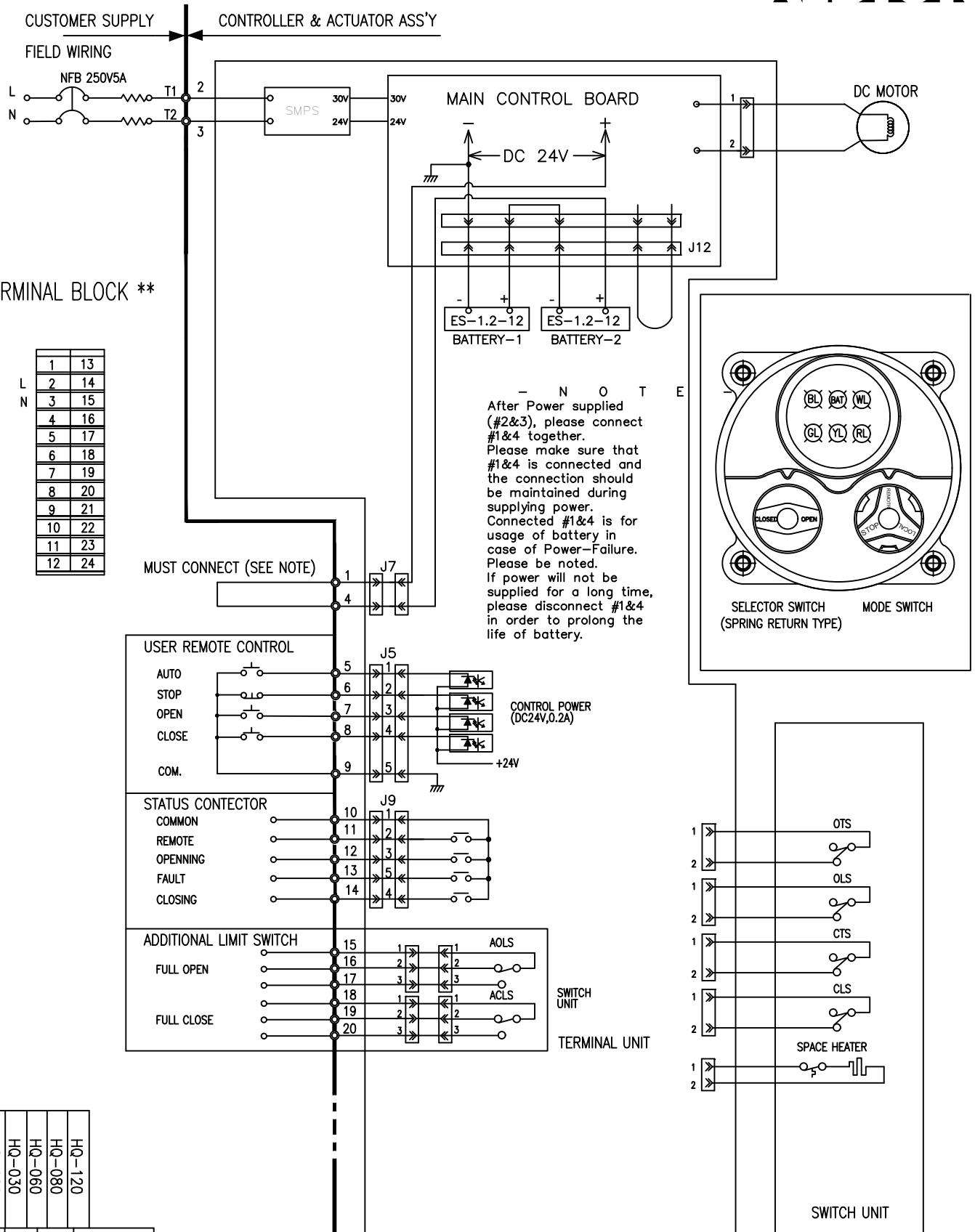
SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
OLS 1-2			
MCLS1-2			
MCLS1-3			
MOLS1-2			
MOLS1-3			
ACLR1-3			
AOLR1-3			
CTS 1-3	* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		
OTS 1-3	* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE		
SYMBOL	DESCRIPTION		RATING
CLS	CLOSE LIMIT SWITCH		250VAC 10A
OLS	OPEN LIMIT SWITCH		250VAC 10A
CTS	CLOSE TORQUE SWITCH		250VAC 10A
OTS	OPEN TORQUE SWITCH		250VAC 10A
ACLR	AUX. CLOSE LIMIT RELAY		250VAC 5A
AOLR	AUX. OPEN LIMIT RELAY		250VAC 5A
TP	THERMAL PROTECTOR		250VAC 15A
MCLS	MANUAL CLOSE LIMIT SWITCH		250VAC 10A
MOLS	MANUAL OPEN LIMIT SWITCH		250VAC 10A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

1PH WIRING DIAGRAM PCU		
HQ-120	DWG. NO HQ-15000-E	
HQ-080		
HQ-060		
HQ-050		
HQ-030		
HQ-020	DATE 12/11/18	ISSUE REF: E
HQ-015	Albion Valves (UK) Ltd 01226 729900	
APPLICATION		

DOC : WD-012 1-09-2008

HQ15 - HQ120 110V 230V & Rechargeable Battery Backup



** NOTE ** Technical Explanation

OLS : OPEN LIMIT SWITCH
CLS : CLOSE LIMIT SWITCH
OTS : OPEN TORQUE LIMIT SWITCH
CTS : CLOSE TORQUE LIMIT SWITCH
RL : RED LAMP FOR OPEN
GL : GREEN LAMP FOR CLOSE
YL : YELLOW LAMP FOR FAULT
◎ : MARKS FOR TERMINAL

BAT : BATTERY LAMP MODE
GL : GREEN LAMP FULL RECHARGE
BL : BLUE LAMP MID RECHARGE
RL : RED LAMP LOW RECHARGE
WL : WHITE LAMP FOR POWER
BL : BLUE LAMP FOR REMOTE

** LIMIT SWITCH CONTACT POSITIONS **

ROTOR	CON-TACT	VALVE OPENING (%)	
		0	100
OPEN (OLS)	1-3		
	1-2		
CLOSE (CLS)	1-3		
	1-2		

— : CONTACT ON --- : CONTACT OFF

DOC : WD-01 1-09-2008

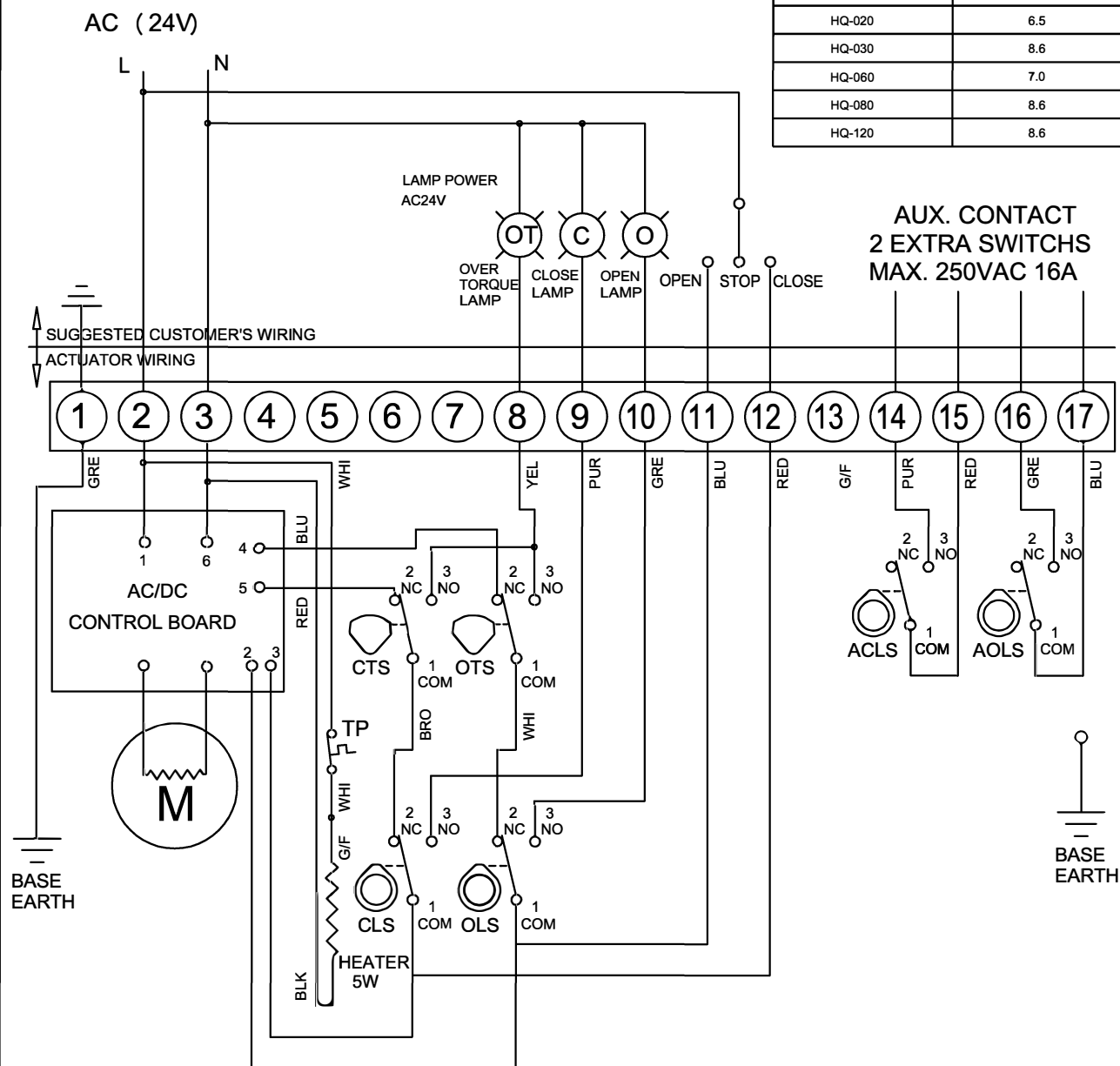
HQ-120	HQ-080	HQ-060	HQ-030	HQ-020	HQ-015	APPLICATION
DWG. NO	HQ - 96000-F	DATE	17.8.2020	ISSUE REF.	F	Albion Valves (UK) Ltd 01226 729900
1 PHASE WIRING DIAGRAM	RBP					



HQ15 - HQ120 24V AC

IMPORTANT NOTE: ENSURE THAT ADEQUATE POWER IS AVAILABLE. FAILURE TO DO SO WILL RESULT IN DAMAGE TO THE ELECTRONICS.

MODEL	MINIMUM AMPS
HQ-015	5.3
HQ-020	6.5
HQ-030	8.6
HQ-060	7.0
HQ-080	8.6
HQ-120	8.6



TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ← INTERMEDIATE → OPEN		
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS1-2			
ACLS1-3			
AOLS1-2			
AOLS1-3			
CTS 1-3	* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		
OTS 1-3	* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE		
SYMBOL	DESCRIPTION		RATING
CLS	CLOSE LIMIT SWITCH		250VAC 10A
OLS	OPEN LIMIT SWITCH		250VAC 10A
CTS	CLOSE TORQUE SWITCH		250VAC 10A
OTS	OPEN TORQUE SWITCH		250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH		250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH		250VAC 16A
TP	THERMAL PROTECTOR		24VAC/DC

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

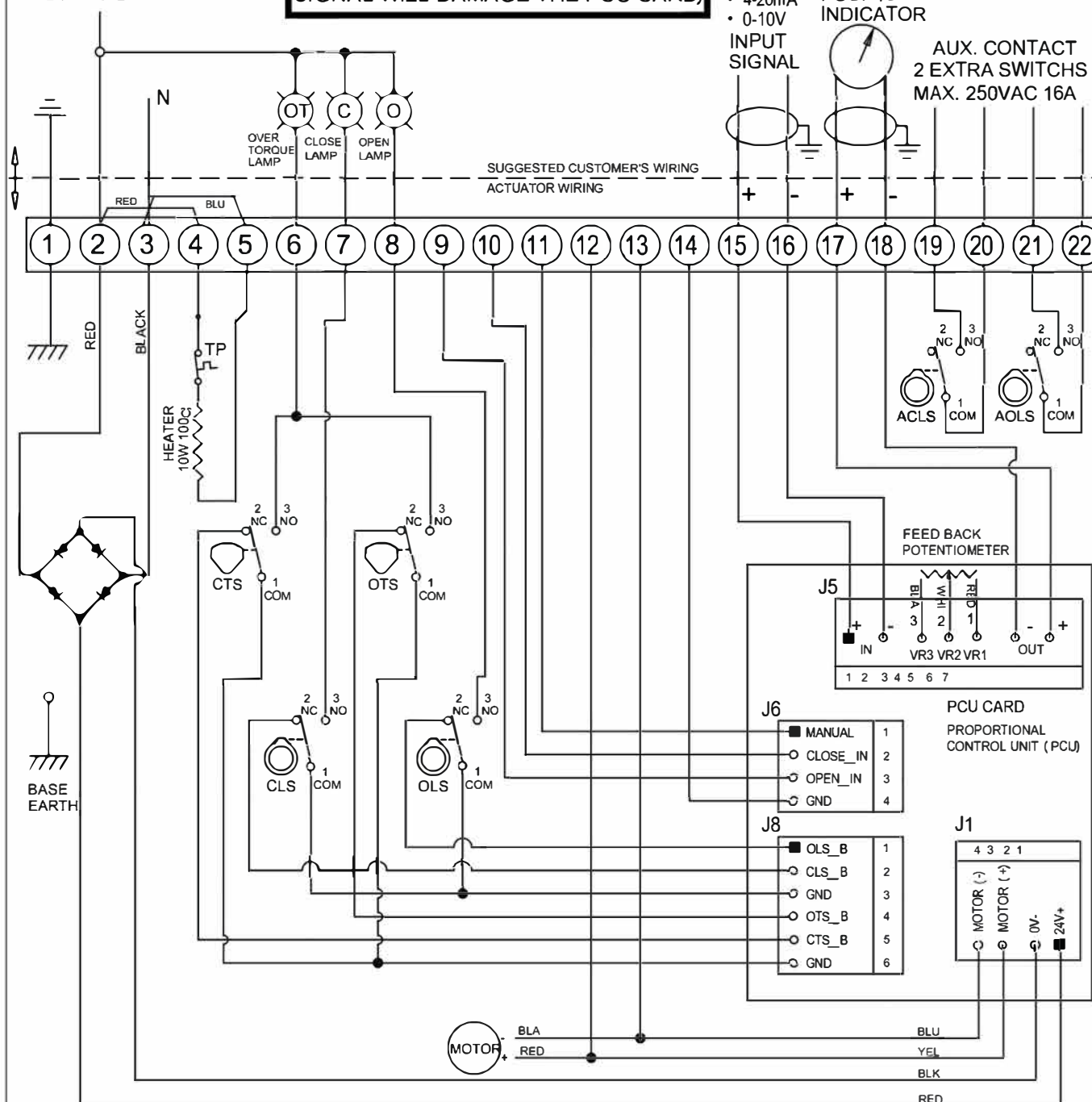
	PART NAME AC WIRING DIAGRAM 24v STANDARD	
HQ-120		
HQ-080	DWG. NO HQ-74000-B	
HQ-060		
HQ-030	DATE 17.8.2020	ISSUE REF: B
HQ-020	Albion Valves (UK) Ltd 01226 729900	
HQ-015		
APPLICATION		
DOC : WD-01 1-09-2008		

HQ15 - HQ120 24V AC & Proportional Control Unit



**POWER & SIGNAL MUST BE ISOLATED
(COMMON 0v BETWEEN POWER &
SIGNAL WILL DAMAGE THE PCU CARD)**

AC POWER SUPPLY
24V AC LIVE



IMPORTANT NOTE: ENSURE THAT ADEQUATE POWER IS AVAILABLE. FAILURE TO DO SO WILL RESULT IN DAMAGE TO THE ELECTRONICS.

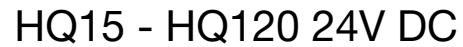
MODEL	MINIMUM AMPS
HQ-015	5.3
HQ-020	6.5
HQ-030	8.6
HQ-060	7.0
HQ-080	8.6
HQ-120	8.6

CTS 1-3	* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE	
OTS 1-3	* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE	
SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
CTS	CLOSE TORQUE SWITCH	250VAC 10A
OTS	OPEN TORQUE SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A
■	FIRST PIN	

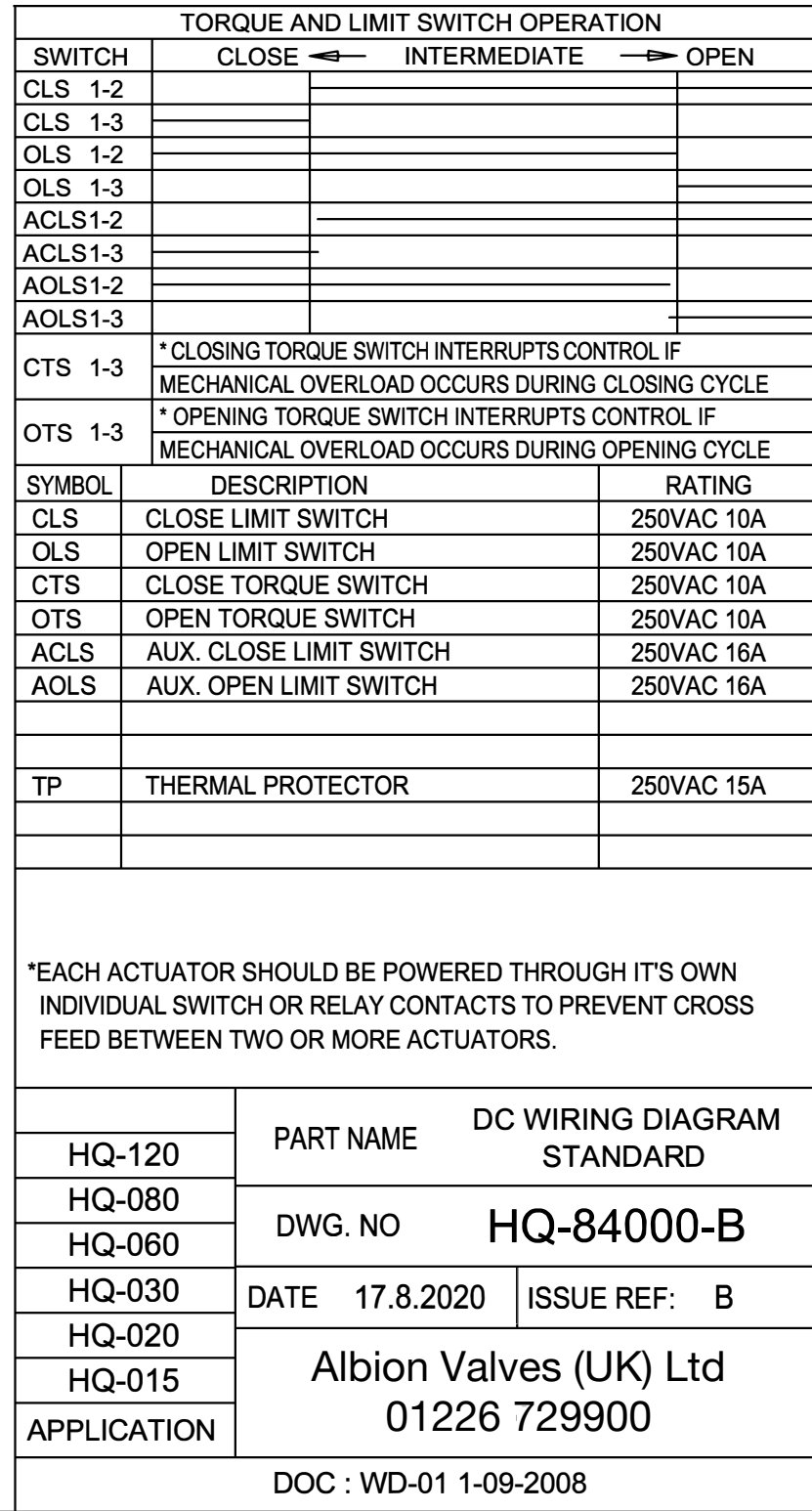
*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

	PART NAME		WIRING DIAGRAM	
HQ-120			AC PCU	
HQ-080	DWG. NO		HQ-85000-AC-B	
HQ-060				
HQ-030	DATE	31.01.2020	ISSUE REF: B	
HQ-020	Albion Valves (UK) Ltd 01226 729900			
HQ-015				
APPLICATION				

DOC : WD-01 1-09-2008

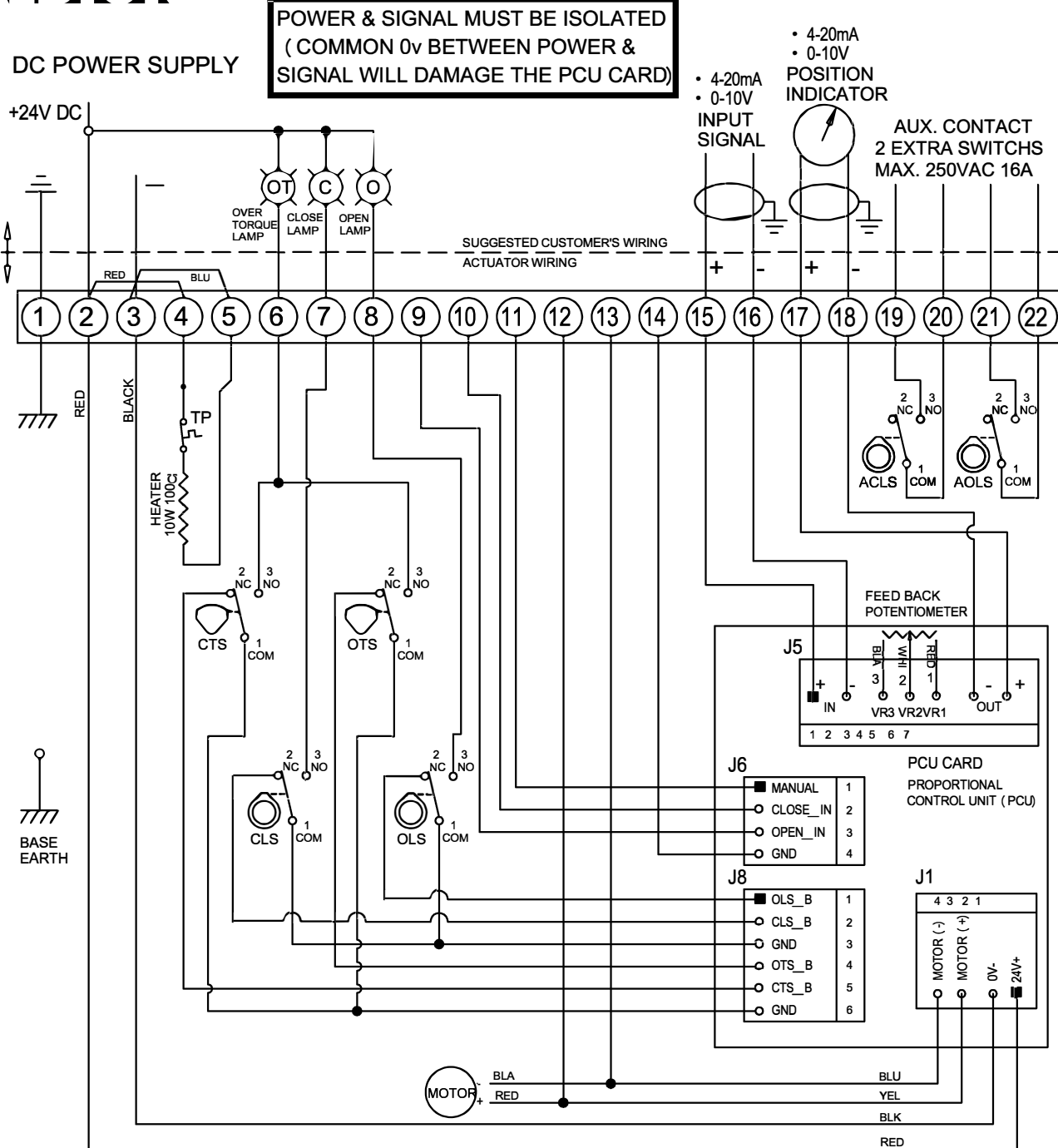


MODEL	MINIMUM AMPS
HQ-015	5.3
HQ-020	6.5
HQ-030	8.6
HQ-060	7.0
HQ-080	8.6
HQ-120	8.6





HQ15 - HQ120 24V DC & Proportional Control Unit



IMPORTANT NOTE: ENSURE THAT ADEQUATE POWER IS AVAILABLE. FAILURE TO DO SO WILL RESULT IN DAMAGE TO THE ELECTRONICS.

MODEL	MINIMUM AMPS
HQ-015	5.3
HQ-020	6.5
HQ-030	8.6
HQ-060	7.0
HQ-080	8.6
HQ-120	8.6

CTS 1-3	* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF	
	MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE	
OTS 1-3	* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF	
	MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE	
SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
CTS	CLOSE TORQUE SWITCH	250VAC 10A
OTS	OPEN TORQUE SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A
■	FIRST PIN	

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

	PART NAME	WIRING DIAGRAM
HQ-120		DC PCU
HQ-080	DWG. NO	HQ-85000-DC-B
HQ-060	DATE	21.8.2020
HQ-030	ISSUE REF:	B
HQ-020		
HQ-015		
APPLICATION		

DOC : WD-01 1-09-2008