

TORQUE AND LIMIT SWITCH OPERATION

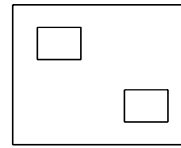
SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 5A
OLS	OPEN LIMIT SWITCH	250VAC 5A

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

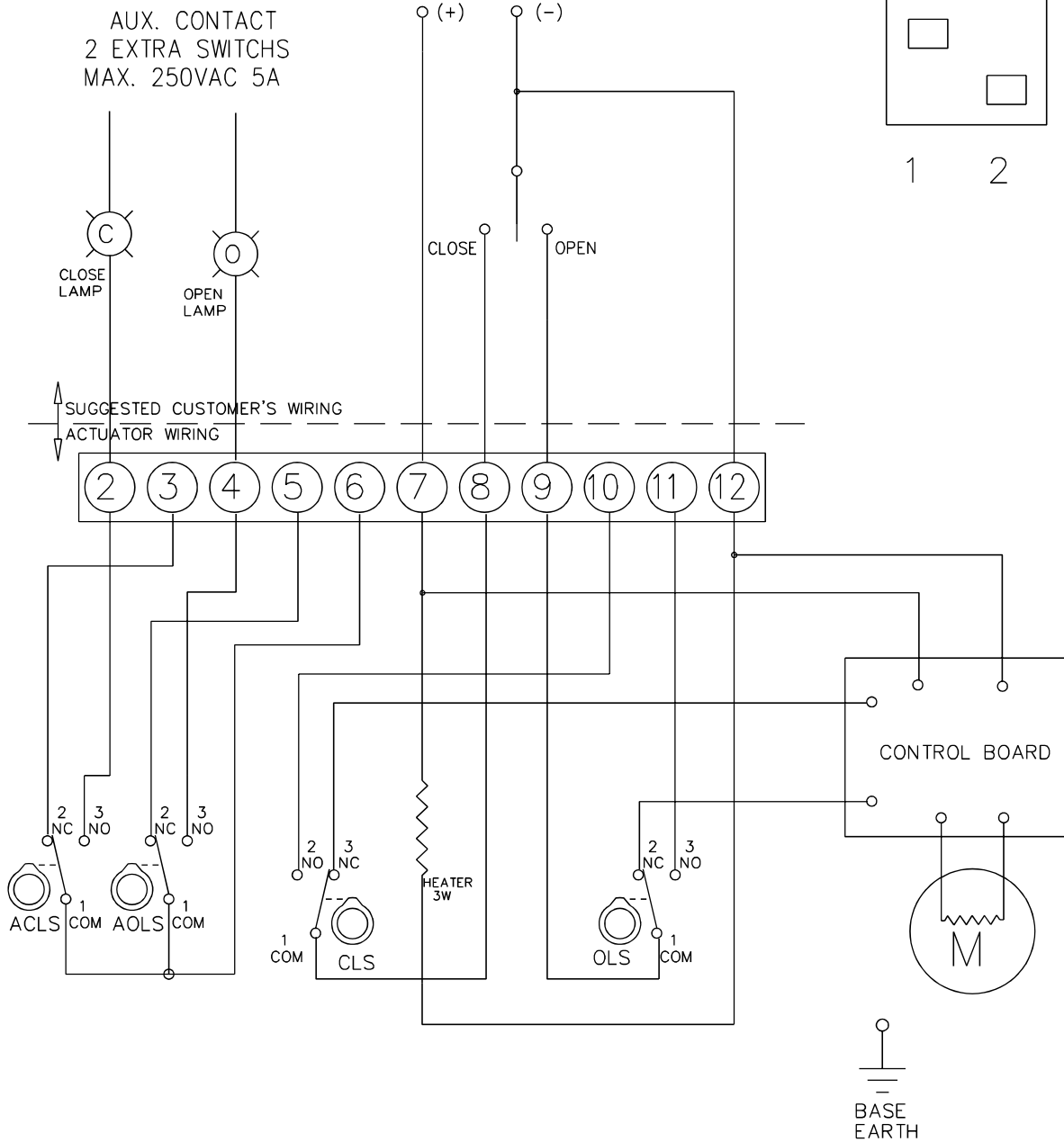
	PART NAME	AC WIRING DIAGRAM STANDARD(AC 24V)
	DWG. NO	HQ-740-B
	DATE	2004.12.01
	ISSUE REF:	B
HQ-006	ACTUATED SOLUTIONS LTD	
HQ-004	TEL: (01243) 827469	
APPLICATION	FAX: (01243) 829418	

DIP SWITCH SETTING



1 2

DC (24 V)



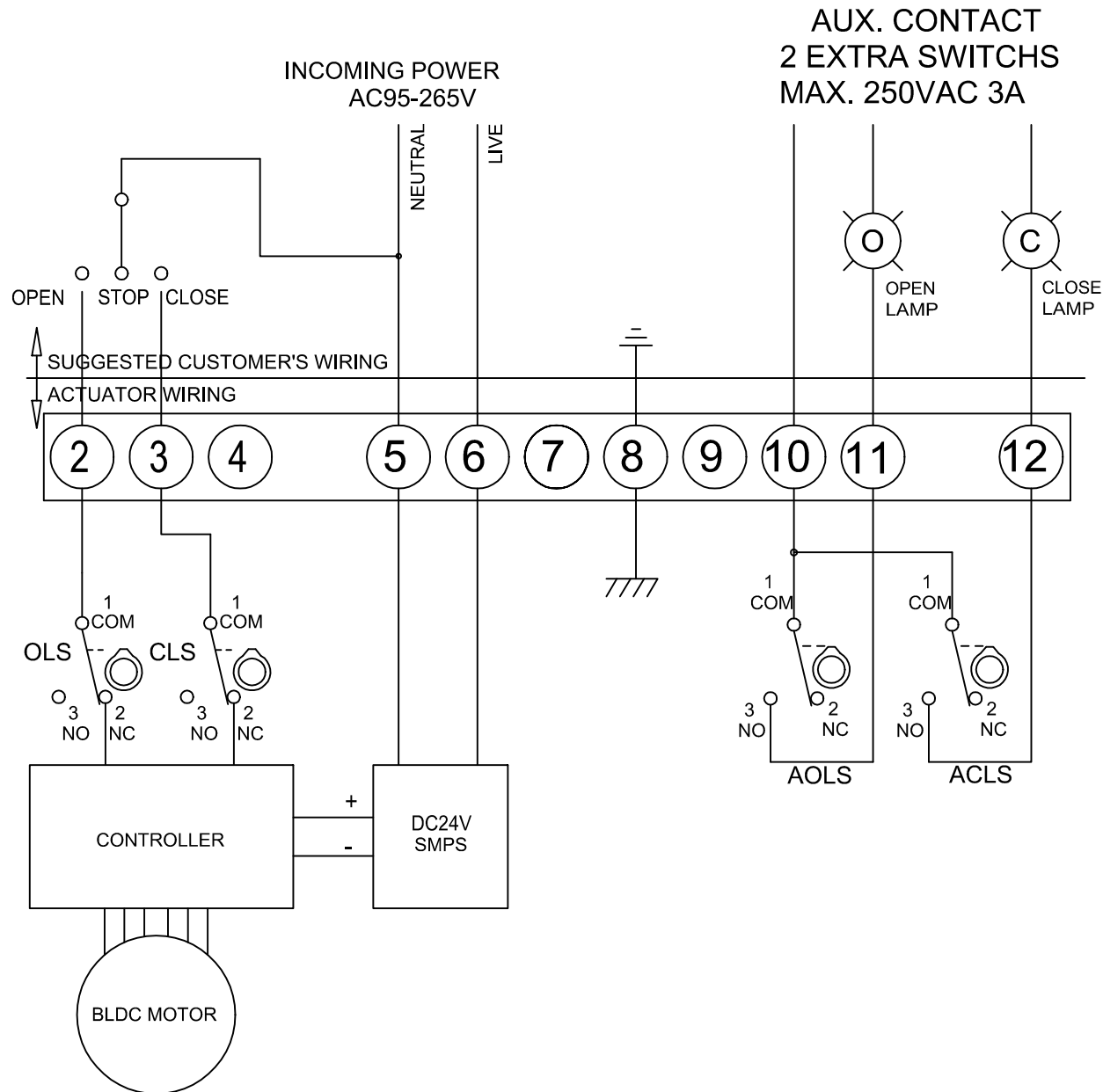
TORQUE AND LIMIT SWITCH OPERATION

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

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 5A
OLS	OPEN LIMIT SWITCH	250VAC 5A

*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(DC 24V)
DWG. NO	HQ-840-B
DATE	2004.12.01
ISSUE REF:	B
HQ-006	ACTUATED SOLUTIONS LTD
HQ-004	TEL: (01243) 827469
APPLICATION	FAX: (01243) 829418



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			

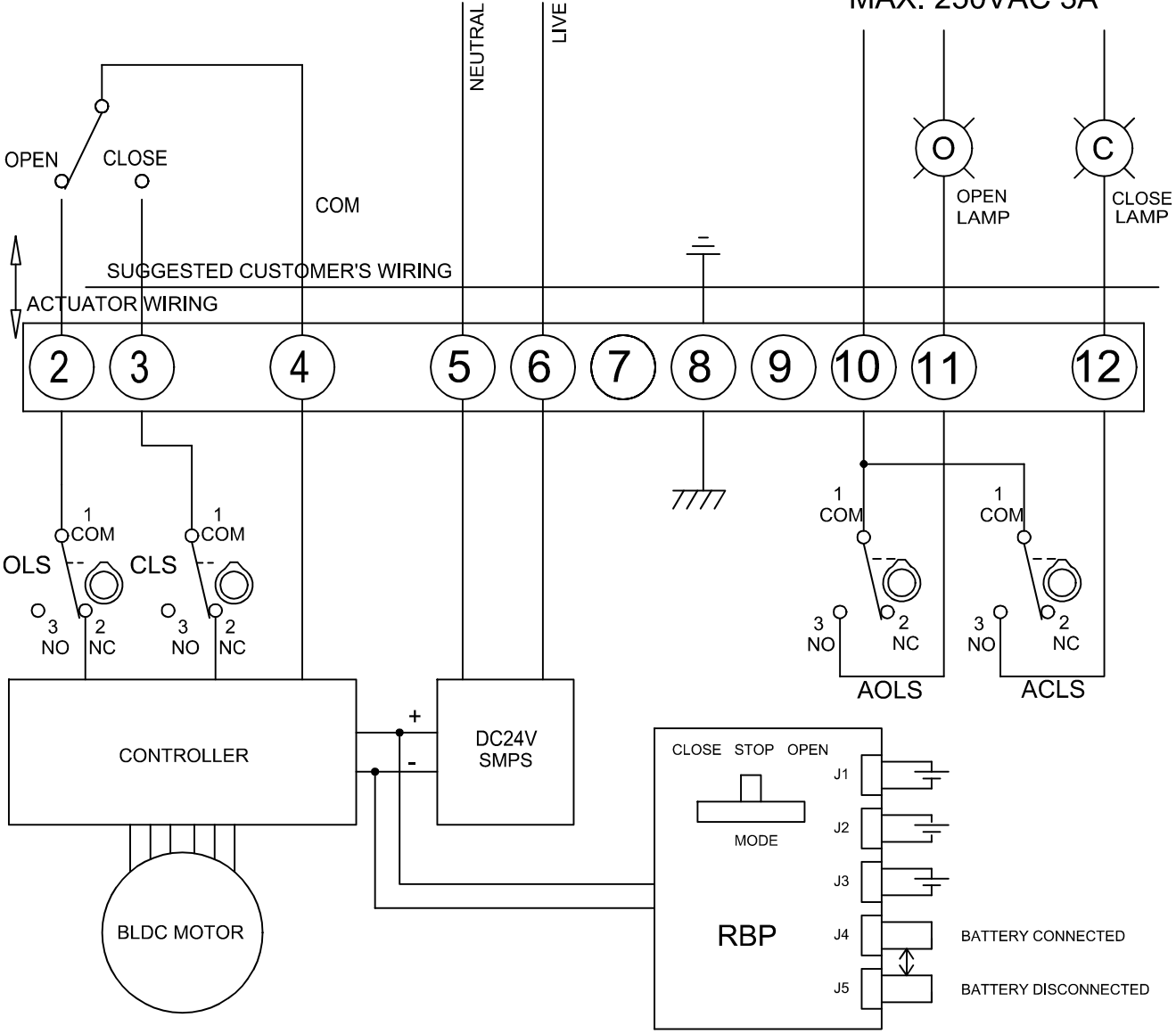
SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 5A
OLS	OPEN LIMIT SWITCH	250VAC 5A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 5A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 5A

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

DRAW	J.K.CHOI	CHECK	
DESIGN	S.G.KANG	APPR.	
PART NAME		BLDC WIRING DIAGRAM AC95-265V STANDARD	
DWG. NO		HQ-203-B	
ISSU. DEPT. HADR		DATE 2015.07.01	
HQ-005		ACTUATED SOLUTIONS LTD	
APPLICATION		TEL: (01243) 827469 FAX: (01243) 829418	

INCOMING POWER
AC95-265V

AUX. CONTACT
2 EXTRA SWITCHES
MAX. 250VAC 3A



TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 5A
OLS	OPEN LIMIT SWITCH	250VAC 5A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 5A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 5A

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

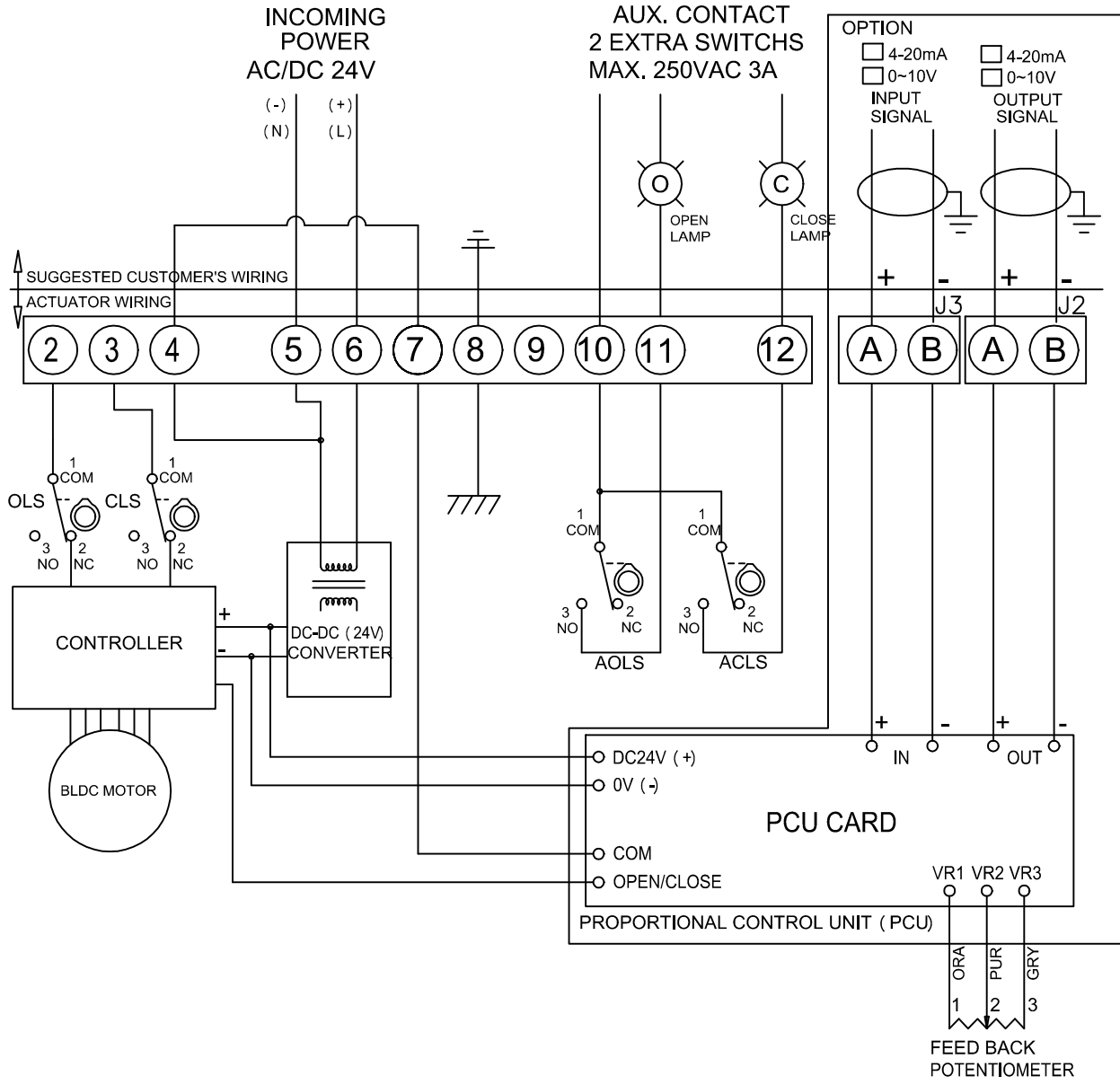
DRAW	J.S.KIM	CHECK	
DESIGN	S.G.KANG	APPR.	

PART NAME	BLDC WIRING DIAGRAM RBP	
DWG. NO	HQ-203-AR	
DATE	2020.04.09	ISSUE REF: A

NOTE.
TO PUT BATTERY IN CIRCUIT MOVE JUMPER FROM J5 TO J4
SET FAIL MODE USING THE SELECTOR SWITCH: OPEN, STOP OR CLOSE

HQ-005
APPLICATION

ACTUATED SOLUTIONS LTD
TEL: (01243) 827469
FAX: (01243) 829418



TORQUE AND LIMIT SWITCH OPERATION

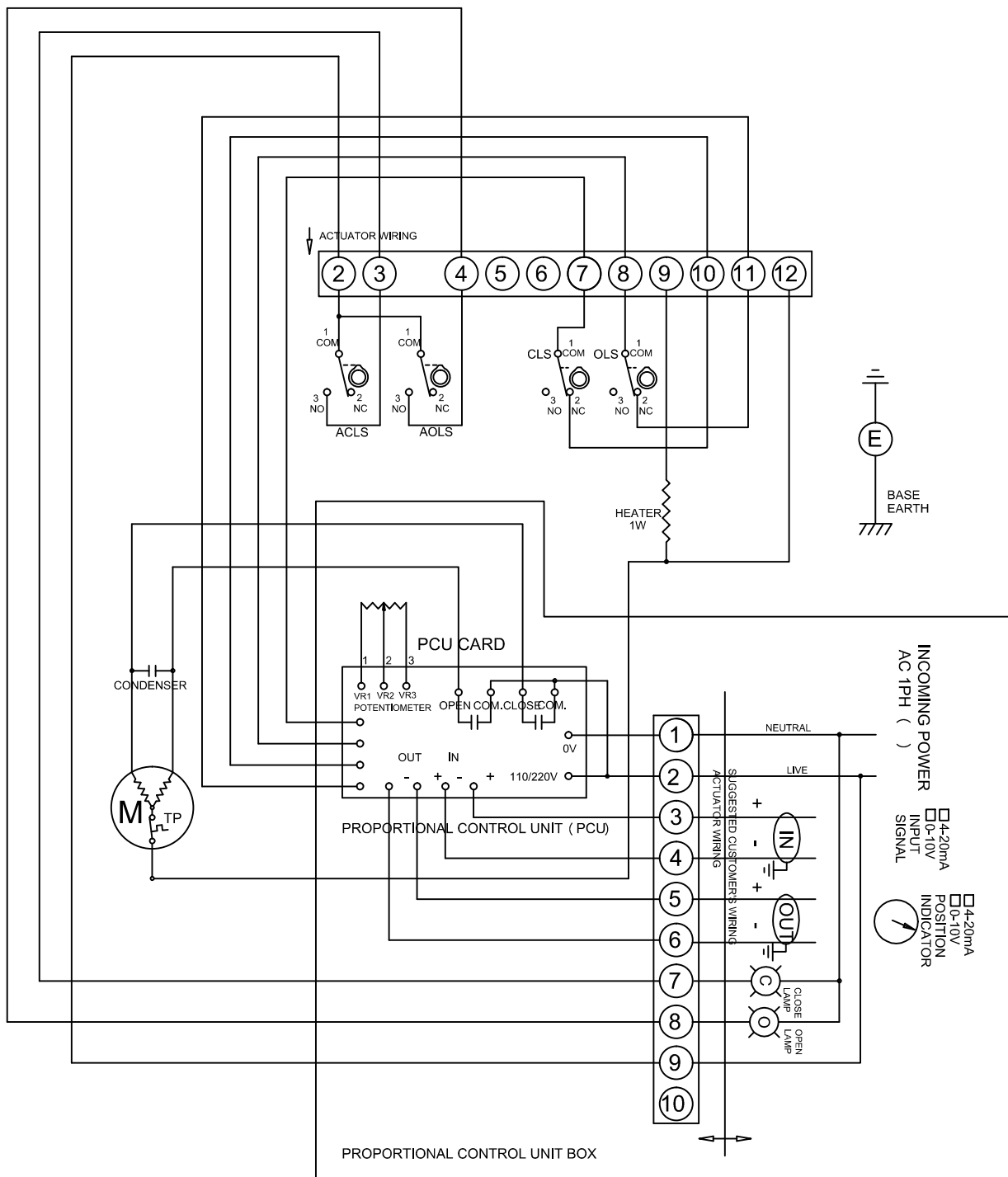
SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 5A
OLS	OPEN LIMIT SWITCH	250VAC 5A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 5A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 5A

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

DRAW	J.S.KIM	CHECK	
DESIGN	S.G.KANG	APPR.	

PART NAME		BLDC WIRING DIAGRAM 24v AC/DC + PCU	
DWG. NO		HQ-253-D	
ISSU. DEPT. HADR		DATE 2016.03.08	
HQ-005		ACTUATED SOLUTIONS LTD TEL: (01243) 827469	
APPLICATION		FAX: (01243) 829418	



TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			

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

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

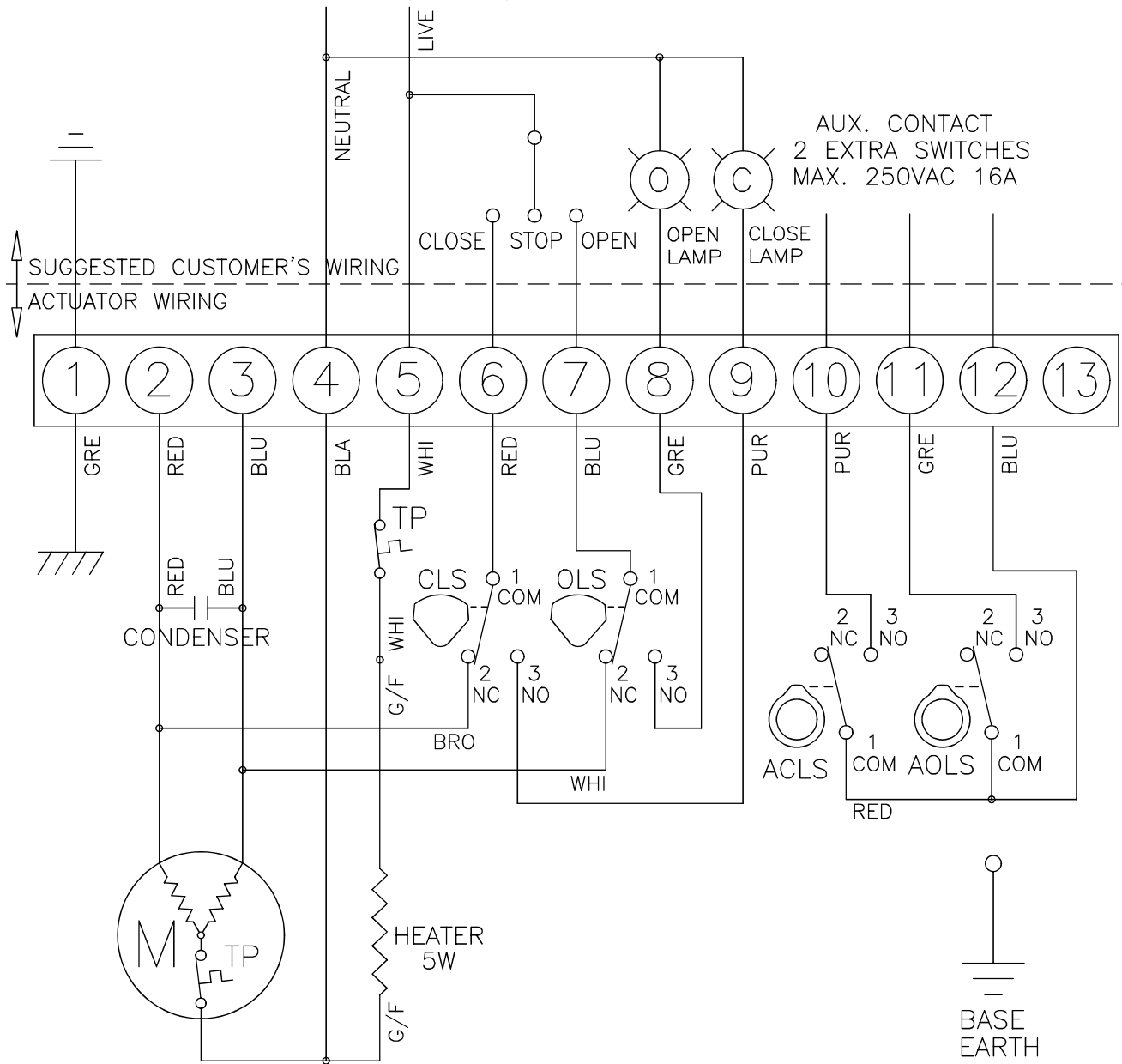
1PH WIRING DIAGRAM PCU

DWG. NO HQ-150-D

DATE 2018.2.21 | ISSUE REF: D

HQ-006
APPLICATION ACTUATED SOLUTIONS LTD
TEL: (01243) 827469
FAX: (01243) 829418

INCOMING POWER
AC 1PH (V)



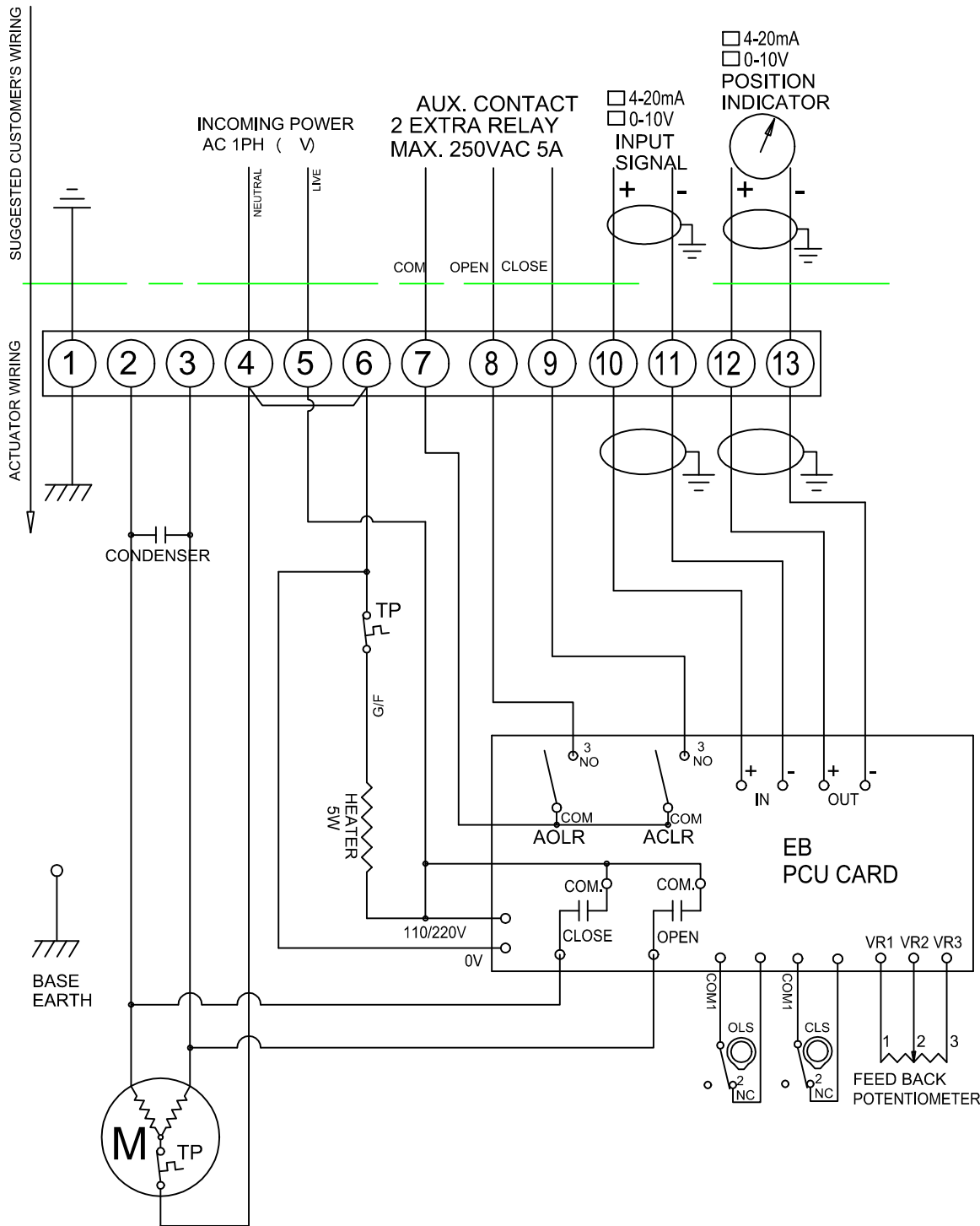
TORQUE AND LIMIT SWITCH OPERATION

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
	ACTUATED SOLUTIONS LTD	
	TEL: (01243) 827469	
	FAX: (01243) 829418	
HQ-008		
APPLICATION		



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.

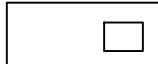
	PART NAME 1PH WIRING DIAGRAM STANDARD+PCU	
	DWG. NO HQ-1500-E	
	DATE 22/11/18	ISSUE REF: E
HQ-008	ACTUATED SOLUTIONS LTD	
APPLICATION	TEL: (01243) 827469	
	FAX: (01243) 829418	

OLD

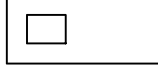
DIP SWITCH SETTING

V1.4 (RED)

ON

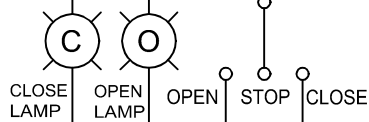


OFF

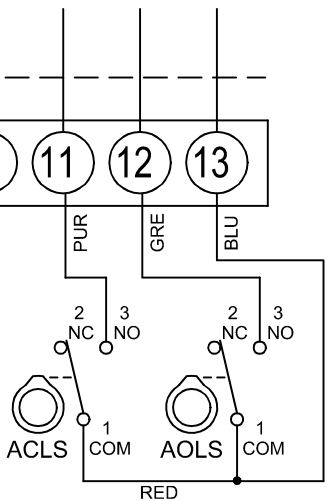


AC (24 V)

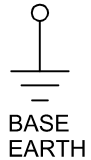
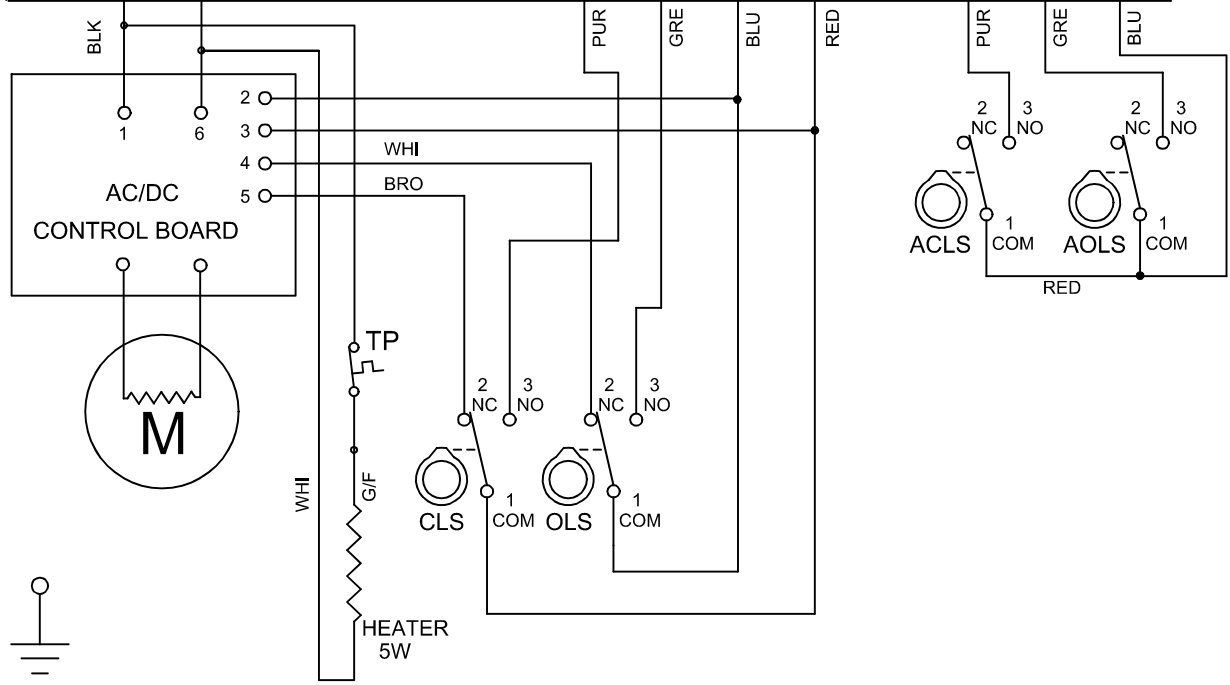
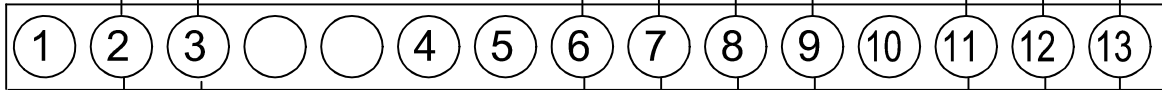
L N



AUX. CONTACT
2 EXTRA SWITCHES
MAX. 250VAC 16A



↑ SUGGESTED CUSTOMER'S WIRING
↓ ACTUATOR WIRING



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			

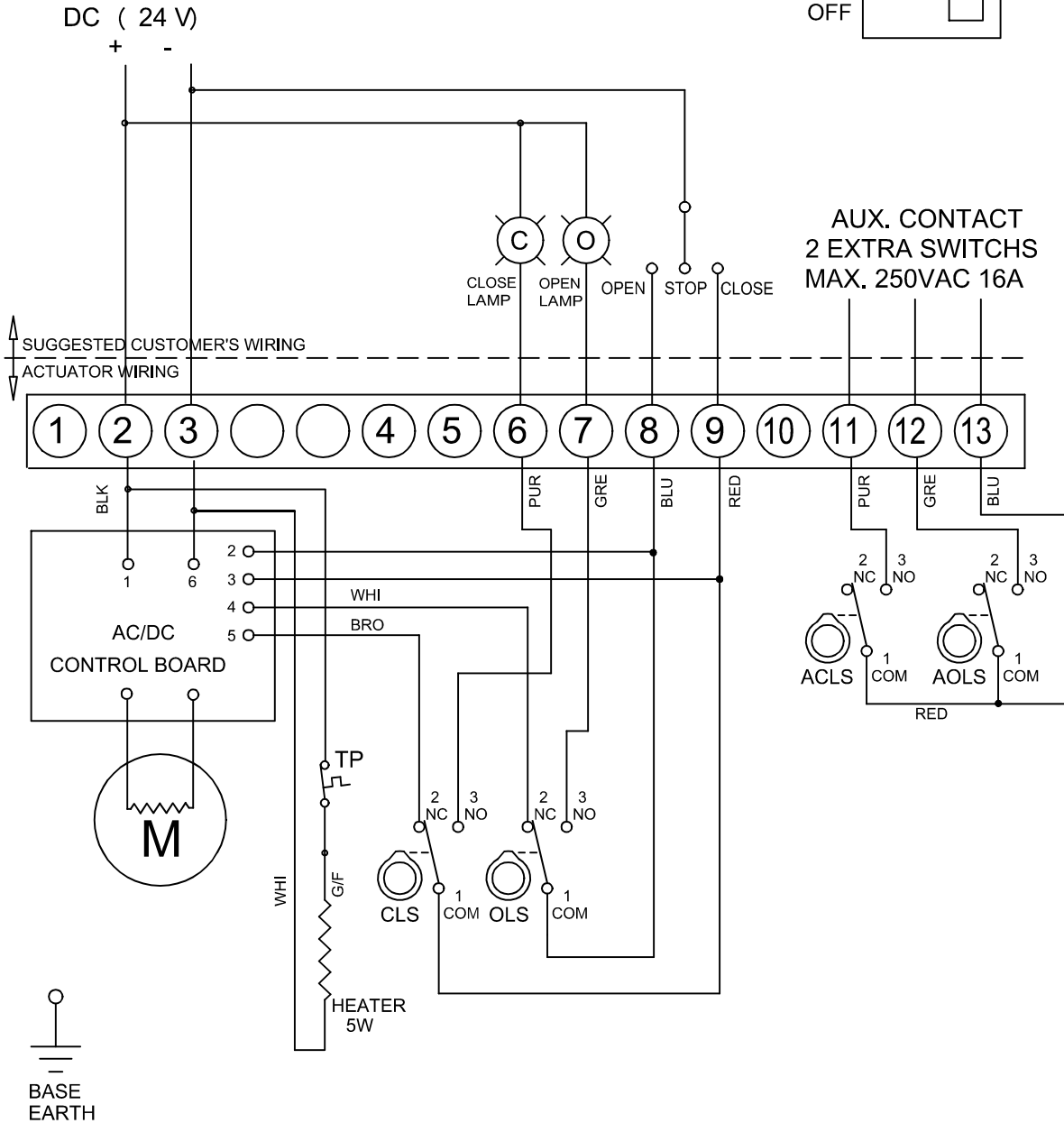
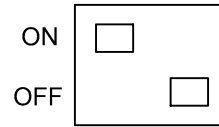
SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A

*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-B	
DATE	9.4.2024	ISSUE REF: B
HQ-008	ACTUATED SOLUTIONS LTD	
APPLICATION	TEL: (01243) 827469	
	FAX: (01243) 829418	

OLD

DIP SWITCH SETTING
V1.4 (RED)



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**

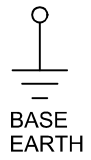
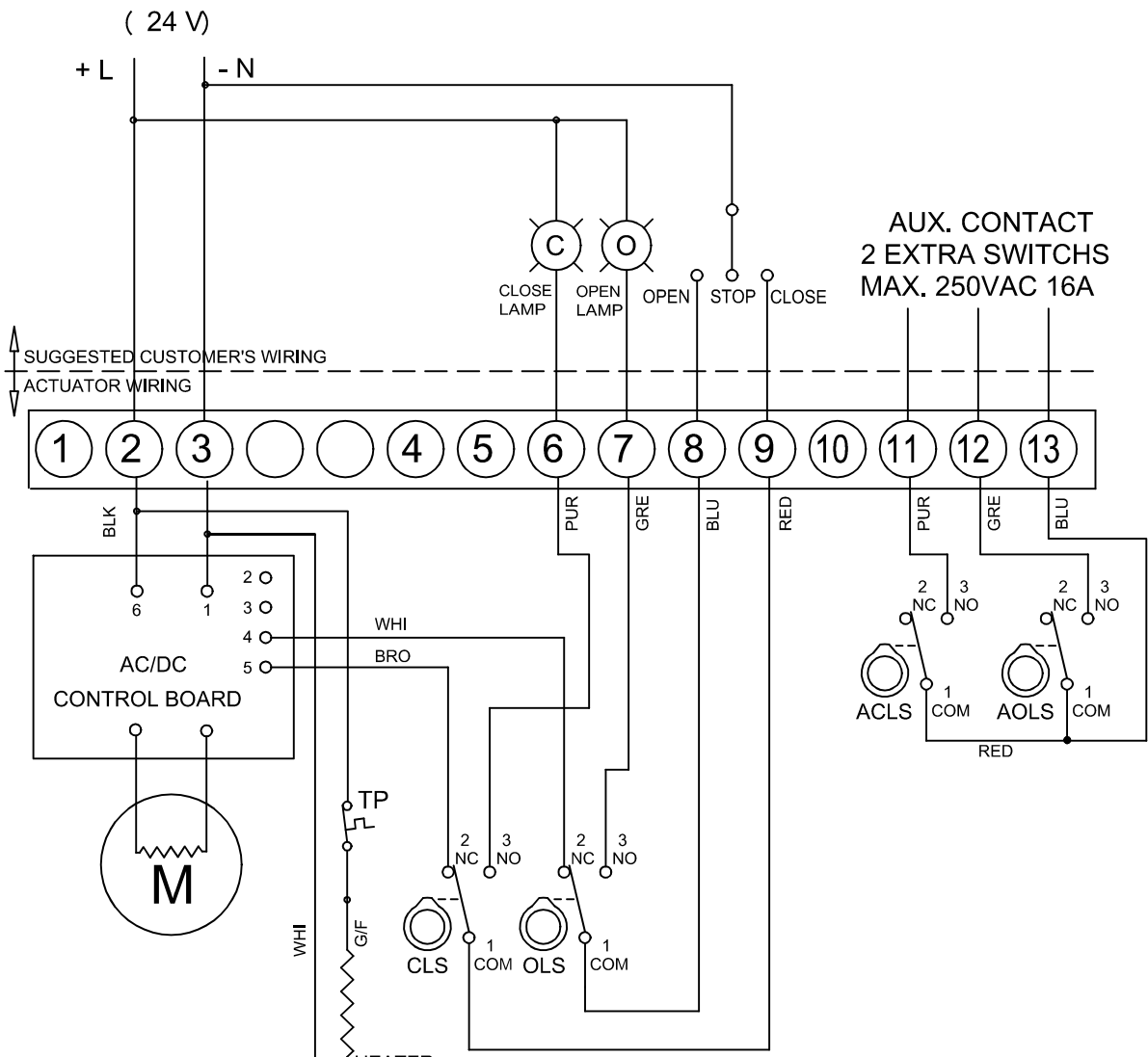
DWG. NO **HQ-8420-B**

DATE **9.4.2024** ISSUE REF: **B**

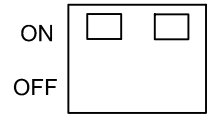
HQ-008
APPLICATION

ACTUATED SOLUTIONS LTD
TEL: (01243) 827469
FAX: (01243) 829418

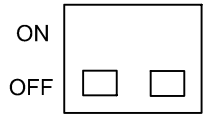
DOC : WD-01 1-09-2008



DIP SWITCH SETTING
AC V1.5 (GREEN PCB)



DIP SWITCH SETTING
DC V1.5 (GREEN PCB)



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.

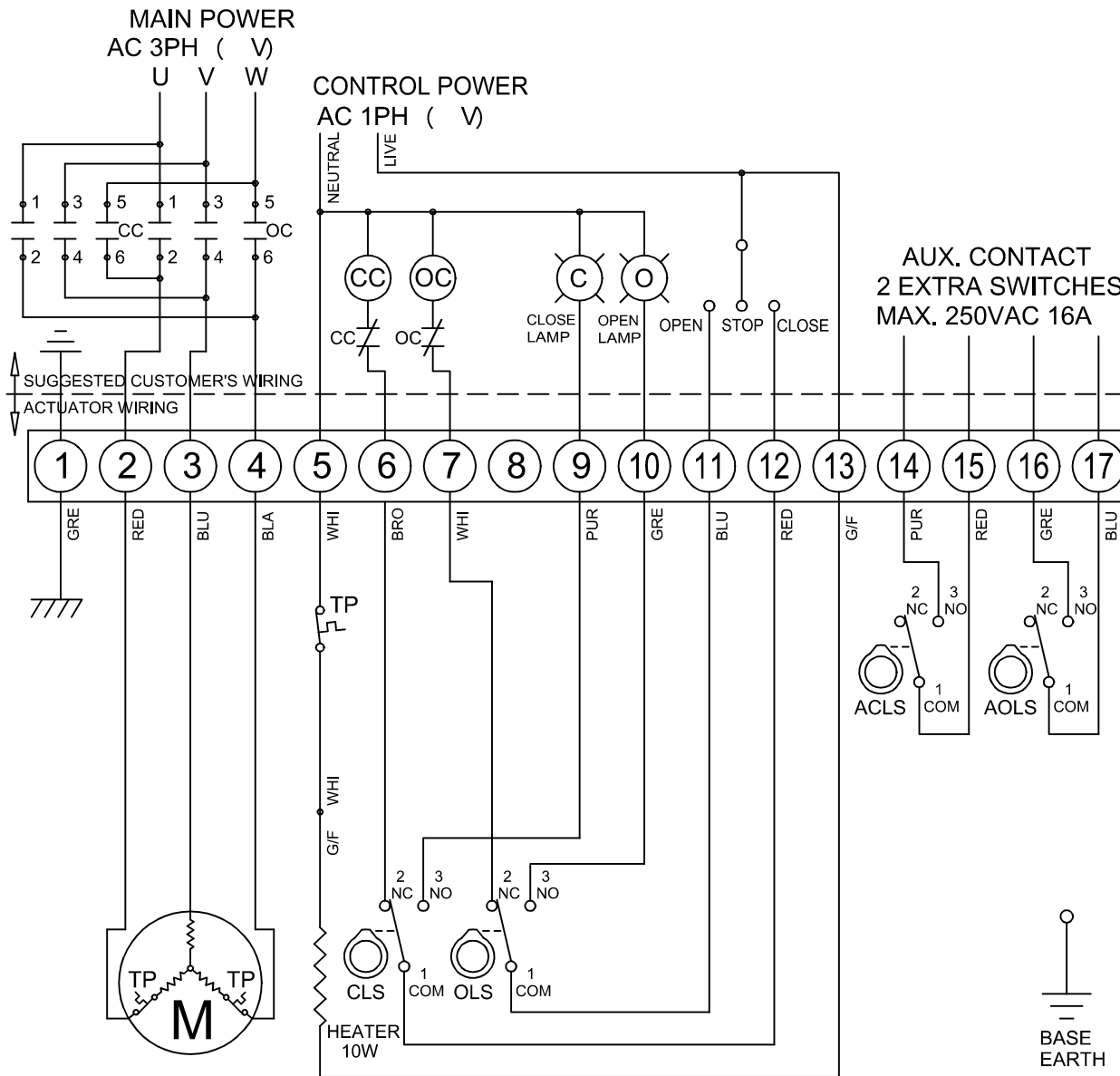
PART NAME AC/DC WIRING DIAGRAM STANDARD

DWG. NO HQ-8420-V1.5

DATE 21.5.2024 ISSUE REF: A

HQ-008
APPLICATION

ACTUATED SOLUTIONS LTD
TEL: (01243) 827469
FAX: (01243) 829418



TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2	█	█	█
CLS 1-3	█	█	█
OLS 1-2	█	█	█
OLS 1-3	█	█	█
ACLS 1-2	█	█	█
ACLS 1-3	█	█	█
AOLS 1-2	█	█	█
AOLS 1-3	█	█	█
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
ACLS	AUX. CLOSE LIMIT SWITCH		250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH		250VAC 16A
CC	CLOSE MAGNETIC COIL		
OC	OPEN MAGNETIC COIL		
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.

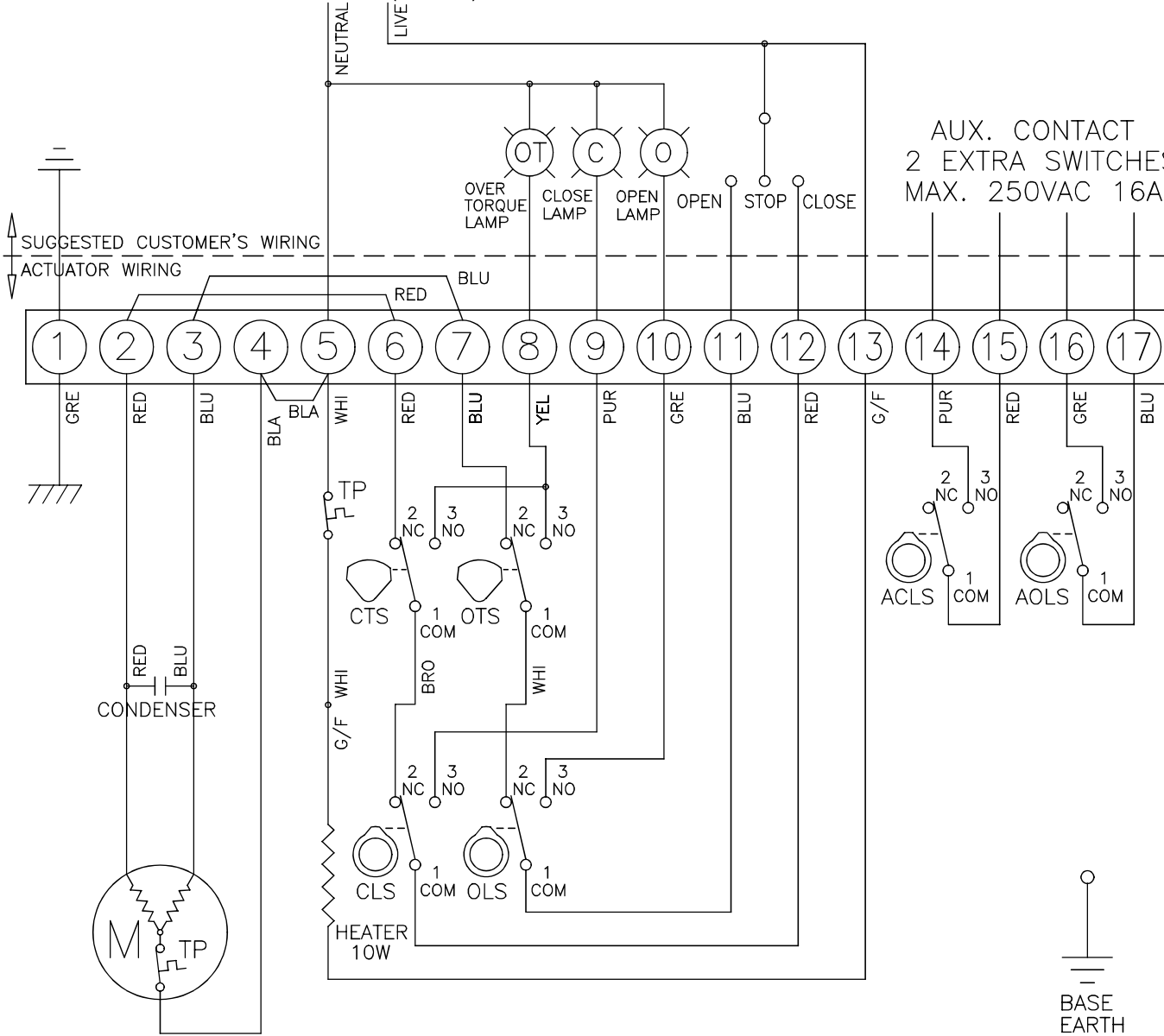
**3 PHASE WIRING DIAGRAM
STANDARD**

DWG. NO **HQ-3200-A**

DATE 1/4/2010 ISSUE REF: A

HQ-010
HQ-008
APPLICATION ACTUATED SOLUTIONS LTD
TEL: (01243) 827469
FAX: (01243) 829418

INCOMING POWER
AC 1PH (V)



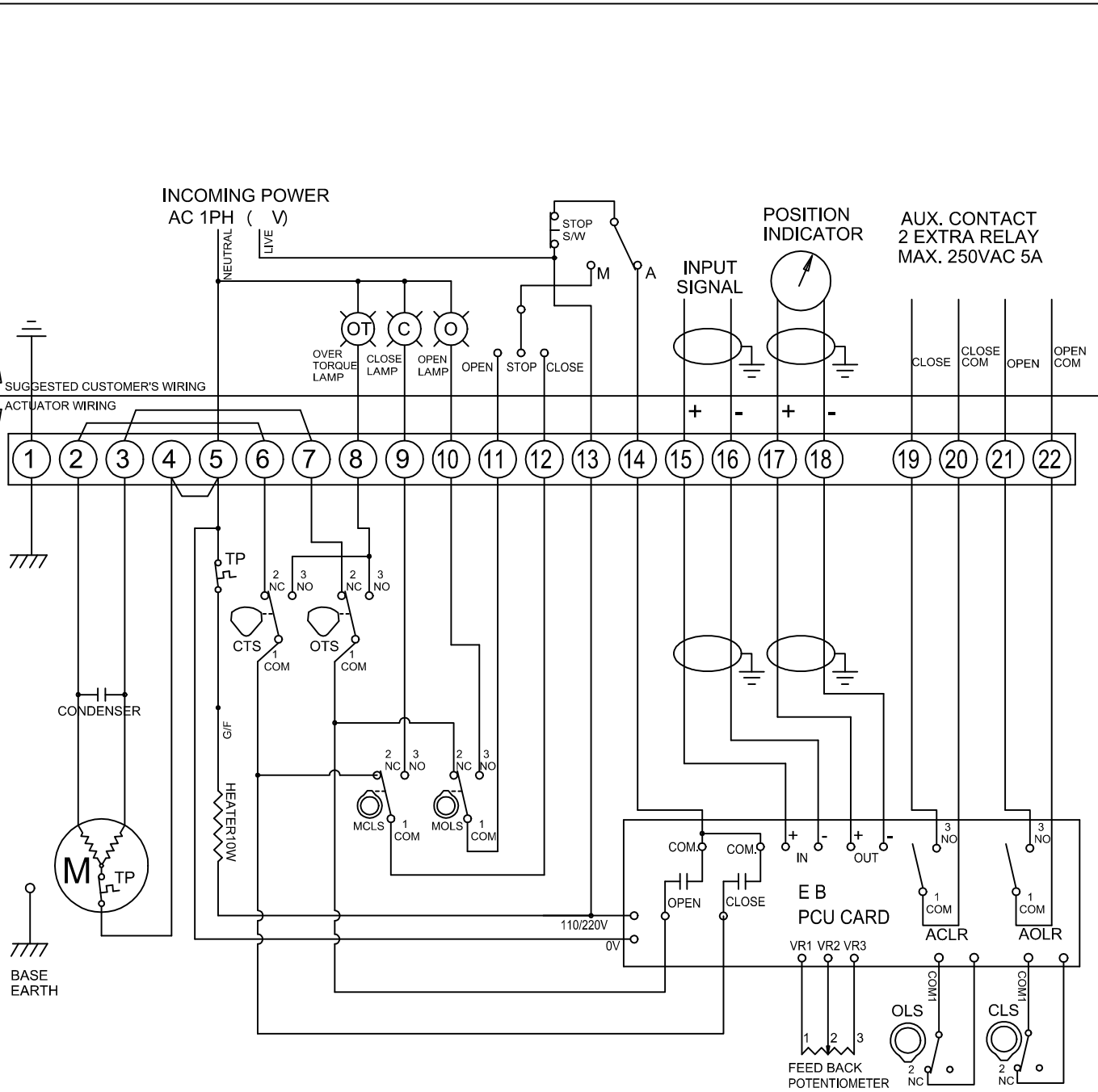
AUX. CONTACT
2 EXTRA SWITCHES
MAX. 250VAC 16A

TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2		█	█
CLS 1-3	█		
OLS 1-2	█	█	
OLS 1-3			█
ACLS 1-2		█	█
ACLS 1-3	█		
AOLS 1-2	█	█	
AOLS 1-3			█
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.

HQ-300	1 PHASE WIRING DIAGRAM STANDARD	
HQ-200		
HQ-120		
HQ-080		
HQ-060	DWG. NO HQ-11000-A	
HQ-050	DATE 10/5/2001	ISSUE REF: A
HQ-030	ACTUATED SOLUTIONS LTD TEL: (01243) 827469 FAX: (01243) 829418	
HQ-020		
HQ-015		
APPLICATION		

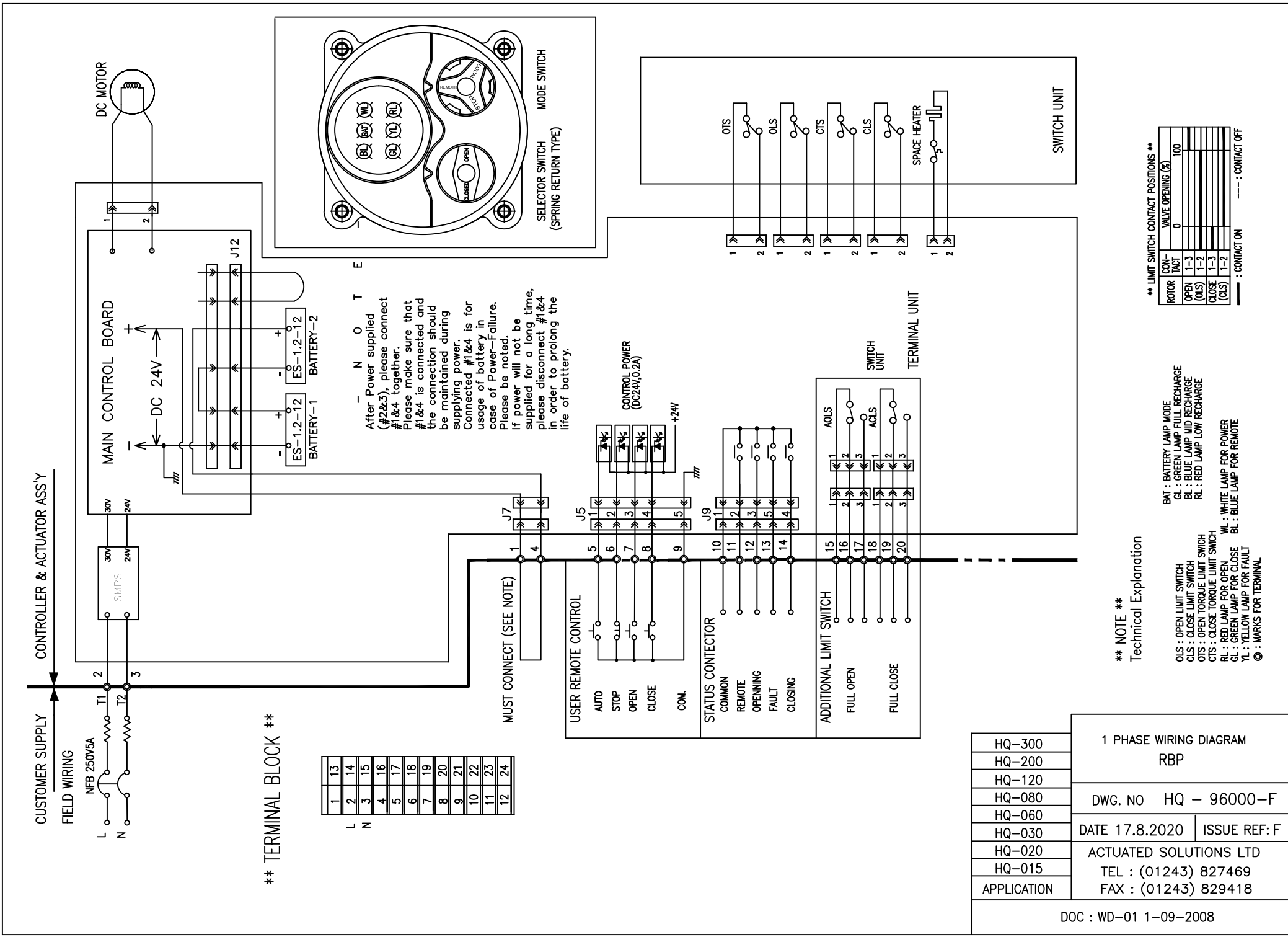


TORQUE AND LIMIT SWITCH OPERATION

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.

HQ-300	1PH WIRING DIAGRAM PCU	
HQ-200		
HQ-120		
HQ-080		
HQ-060	DWG. NO	HQ-15000-E
HQ-050	DATE 12/11/18	ISSUE REF: E
HQ-030		
HQ-020	ACTUATED SOLUTIONS LTD	
HQ-015	TEL: (01243) 827469	
APPLICATION	FAX: (01243) 829418	



** TERMINAL BLOCK **

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

NOTE

After Power supplied (#2&3), please connect #1&4 together.
Please make sure that #1&4 is connected and the connection should be maintained during supplying power.
Connected #1&4 is for usage of battery in case of Power-Failure. Please be noted.
If power will not be supplied for a long time, please disconnect #1&4 in order to prolong the life of battery.

** NOTE **
Technical Explanation

- BAT : BATTERY LAMP MODE
- GL : GREEN LAMP FULL RECHARGE
- BL : BLUE LAMP MID RECHARGE
- RL : RED LAMP LOW RECHARGE
- OLS : OPEN LIMIT SWITCH
- CLS : CLOSE LIMIT SWITCH
- CTS : CLOSE TORQUE LIMIT SWITCH
- RL : RED LAMP FOR OPEN
- GL : GREEN LAMP FOR CLOSE
- YL : YELLOW LAMP FOR FAULT
- WL : WHITE LAMP FOR POWER
- BL : BLUE LAMP FOR REMOTE
- ◎ : MARKS FOR TERMINAL

** LIMIT SWITCH CONTACT POSITIONS **

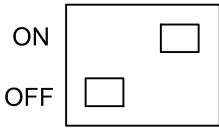
ROTOR	COM-FACT	VALVE OPENING (%)
OPEN (OLS)	1-3	100
CLOSE (CLS)	1-2	
CLOSE (CLS)	1-3	
CLOSE (CLS)	1-2	

— : CONTACT ON
---- : CONTACT OFF

HQ-300	1 PHASE WIRING DIAGRAM	
HQ-200	RBP	
HQ-120	DWG. NO	HQ - 96000-F
HQ-080	DATE	17.8.2020
HQ-060	ISSUE REF:	F
HQ-030	ACTUATED SOLUTIONS LTD	
HQ-020	TEL : (01243) 827469	
HQ-015	FAX : (01243) 829418	
APPLICATION		

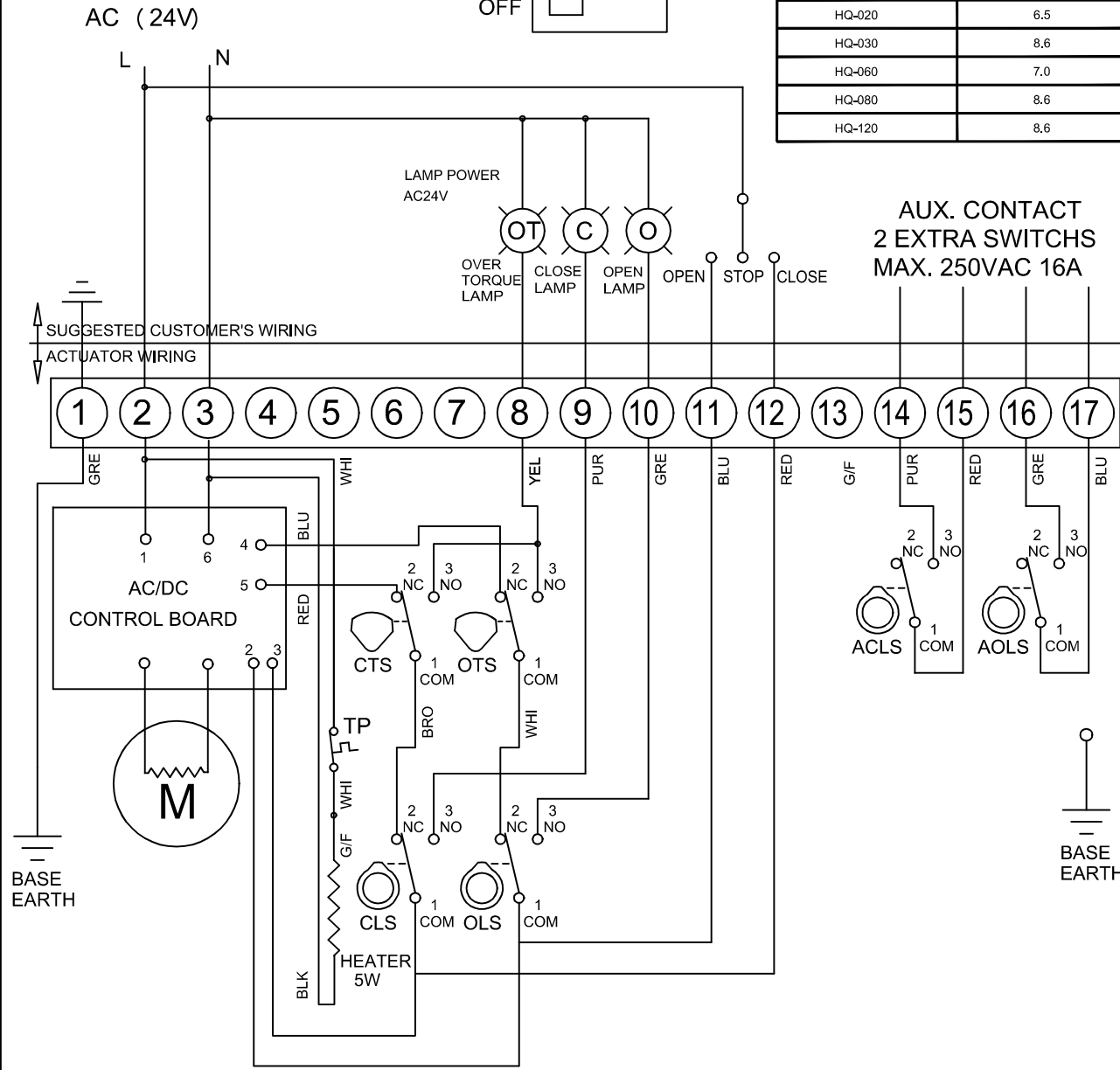
OLD

DIP SWITCH SETTING
V1.4 (RED)



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

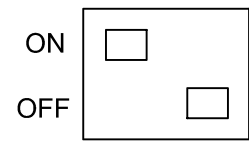
SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS1-2			
ACLS1-3			
AOLS1-2			
AOLS1-3			
CTS 1-3	* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		
OTS 1-3	* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD 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	DWG. NO HQ-74000-B	
HQ-080	DATE 17.8.2020	ISSUE REF: B
HQ-060	ACTUATED SOLUTIONS LTD	
HQ-030	TEL: (01243) 827469	
HQ-020	FAX: (01243) 829418	
HQ-015	APPLICATION	

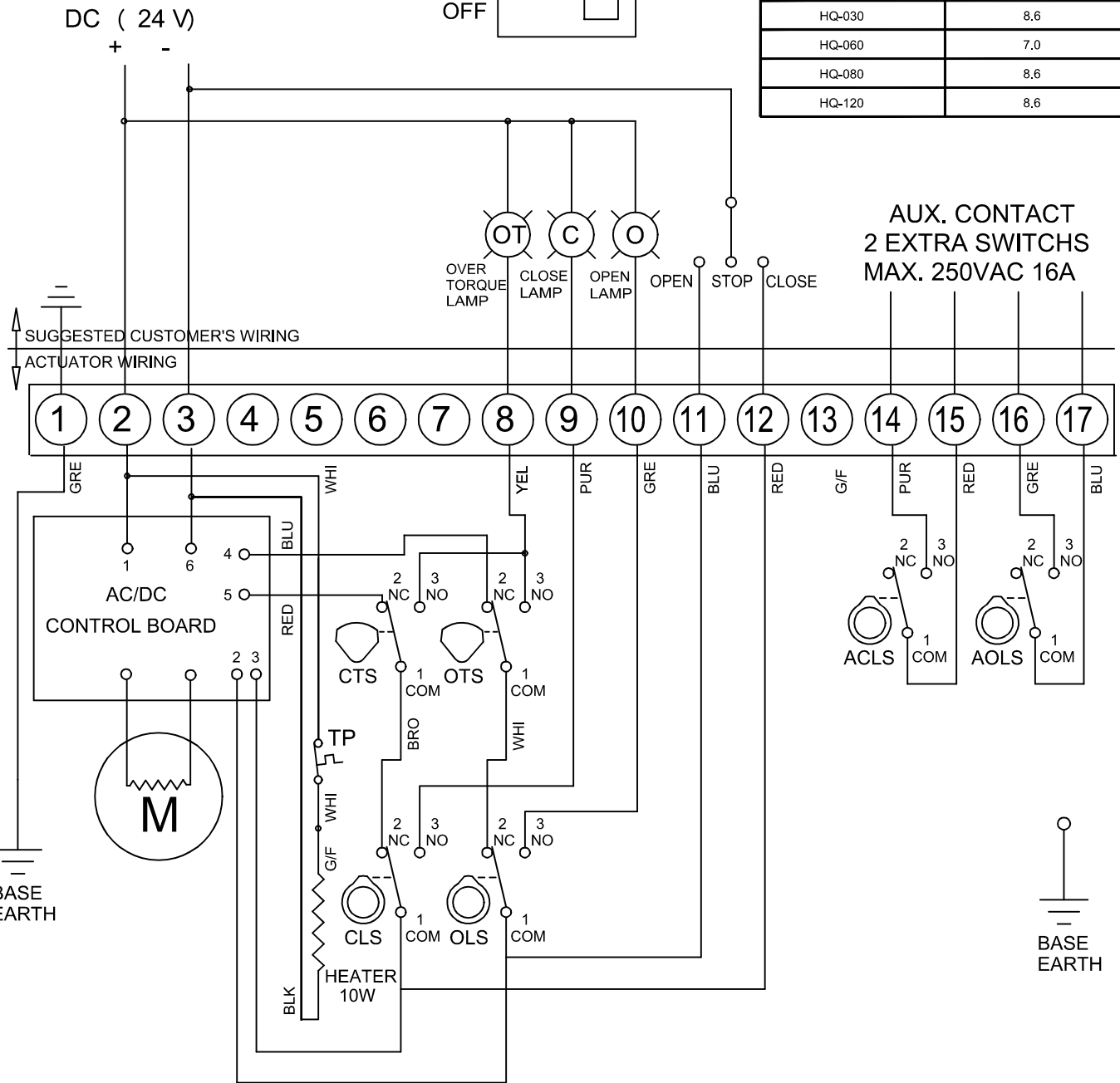
OLD

**DIP SWITCH SETTING
V1.4 (RED)**

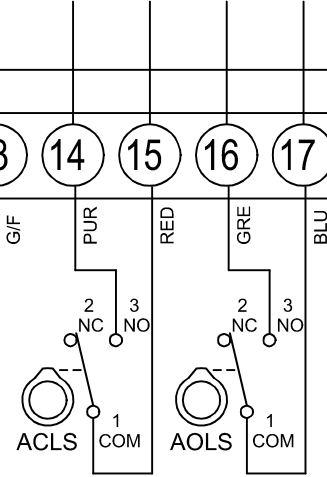


IMPORTANT NOTE: ENSURE THAT ADEQUATE POWER IS AVAILABLE. FAILURE TO DO SO WILL RESULT IN DAMAGE TO THE ELECTRONICS.

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



**AUX. CONTACT
2 EXTRA SWITCHS
MAX. 250VAC 16A**



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

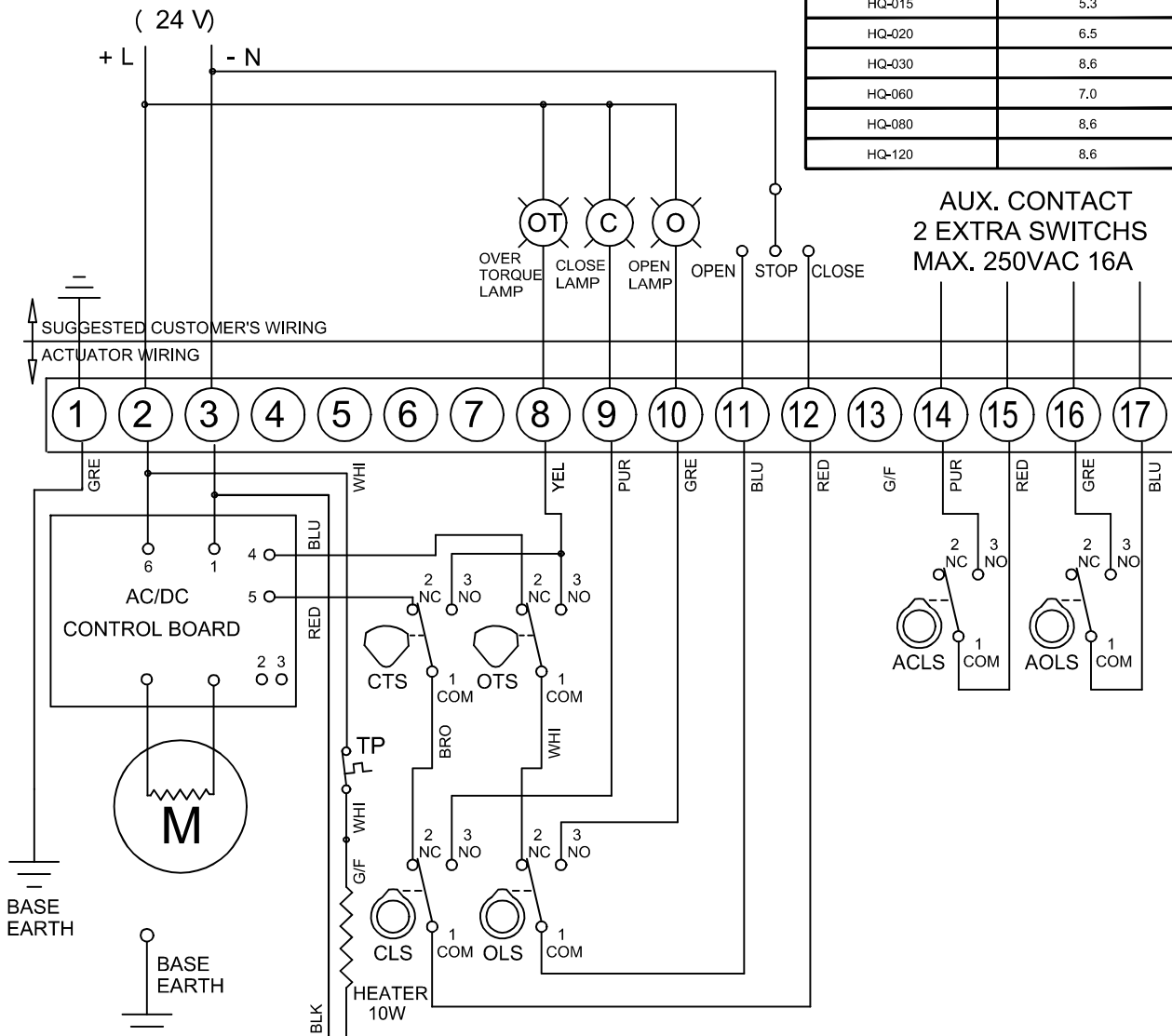
SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
CTS	CLOSE TORQUE SWITCH	250VAC 10A
OTS	OPEN TORQUE SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A

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

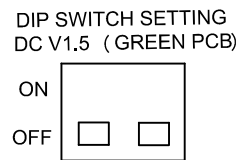
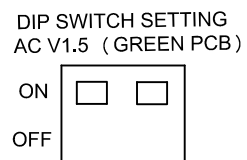
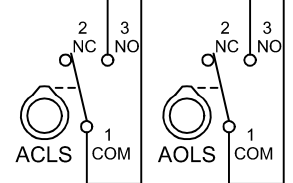
	PART NAME	DC WIRING DIAGRAM STANDARD
HQ-120		
HQ-080		
HQ-060	DWG. NO	HQ-84000-B
HQ-030	DATE	17.8.2020
HQ-020	ISSUE REF:	B
HQ-015	ACTUATED SOLUTIONS LTD	
APPLICATION	TEL: (01243) 827469	
	FAX: (01243) 829418	

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



AUX. CONTACT
2 EXTRA SWITCHES
MAX. 250VAC 16A

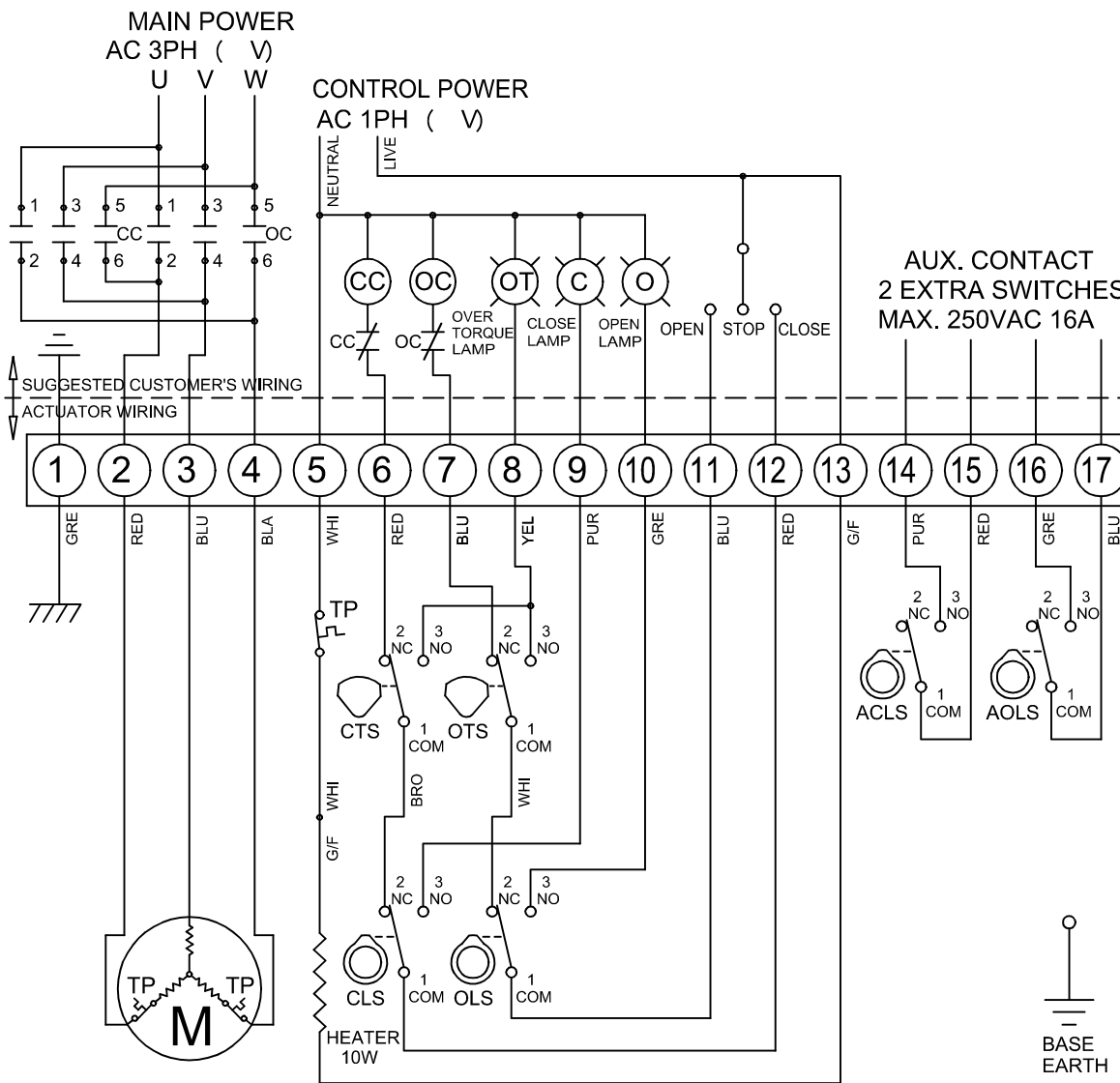


TORQUE AND LIMIT SWITCH OPERATION

SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			
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.

HQ-120	PART NAME AC/DC WIRING DIAGRAM STANDARD	
HQ-080	DWG. NO HQ-84000-V1.5	
HQ-060	DATE 21.5.2024	ISSUE REF: A
HQ-020	ACTUATED SOLUTIONS LTD	
HQ-015	TEL: (01243) 827469	
APPLICATION	FAX: (01243) 829418	
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	█	█	█
ACLS 1-2	█	█	█
ACLS 1-3	█	█	█
AOLS 1-2	█	█	█
AOLS 1-3	█	█	█

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
CC	CLOSE MAGNETIC COIL	
OC	OPEN MAGNETIC COIL	
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.

HQ-300	3 PHASE WIRING DIAGRAM STANDARD	
HQ-200		
HQ-120		
HQ-080		
HQ-060		
HQ-050	DWG. NO	HQ-31000-A
HQ-030	DATE 10/5/2001	ISSUE REF: A
HQ-020	ACTUATED SOLUTIONS LTD TEL: (01243) 827469 FAX: (01243) 829418	
HQ-015		
APPLICATION		