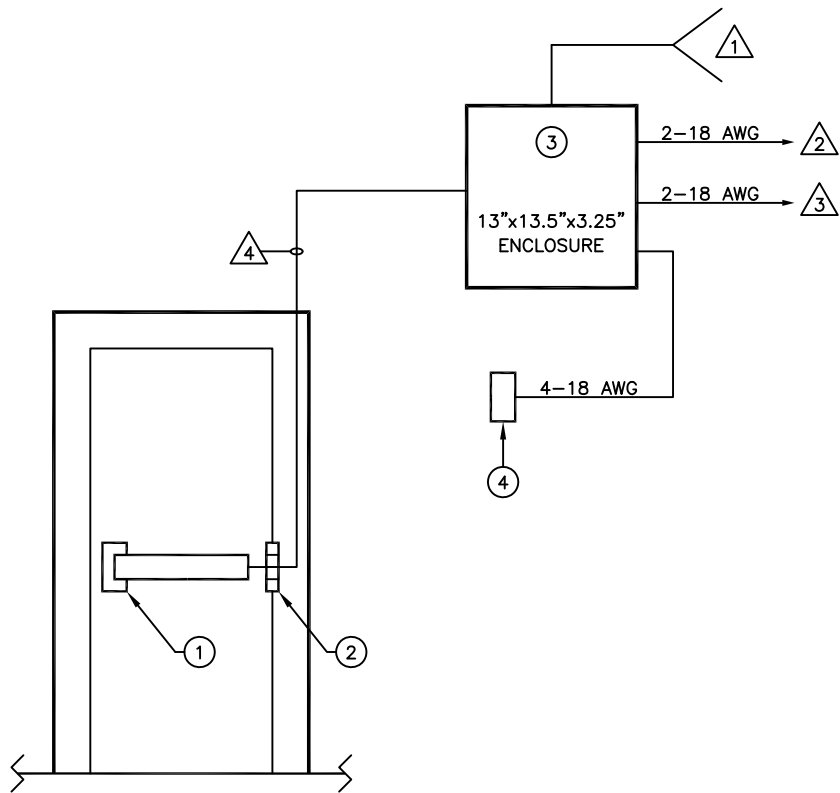




ACSI Series 1550K-MD and 1550-MD Motor Drive Electric Latch Retraction

**Riser and Point-to-Point Drawings for
Standard Access Control Applications
Using Maintained Latch Retraction Control or
Momentary Latch Retraction Control with
Field-Adjustable Time Delay
For Use with ACSI Part Numbers
1451 and 1451-TD**

**Riser and Point-to-Point Drawings for
Standard Access Control and
Day/Night Applications for Openings
Using Automatic Door Operators
For Use with ACSI Part Numbers
1451-AO and 1451-DN**



NOTES:


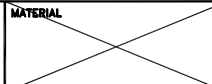
- ① TO 115V., 60HZ., 15A SERVICE.
- ② TO N.C. FIRE ALARM, IF REQUIRED.
- ③ TO A CONTROL DEVICE USING MAINTAINED SWITCH CONTACTS (PUSHBUTTON SWITCH, KEY SWITCH) OR A CONTROL DEVICE RELAY OUTPUT EQUIPPED WITH BUILT-IN TIME DELAY (CARD READER, KEYPAD, MOTION SENSOR).

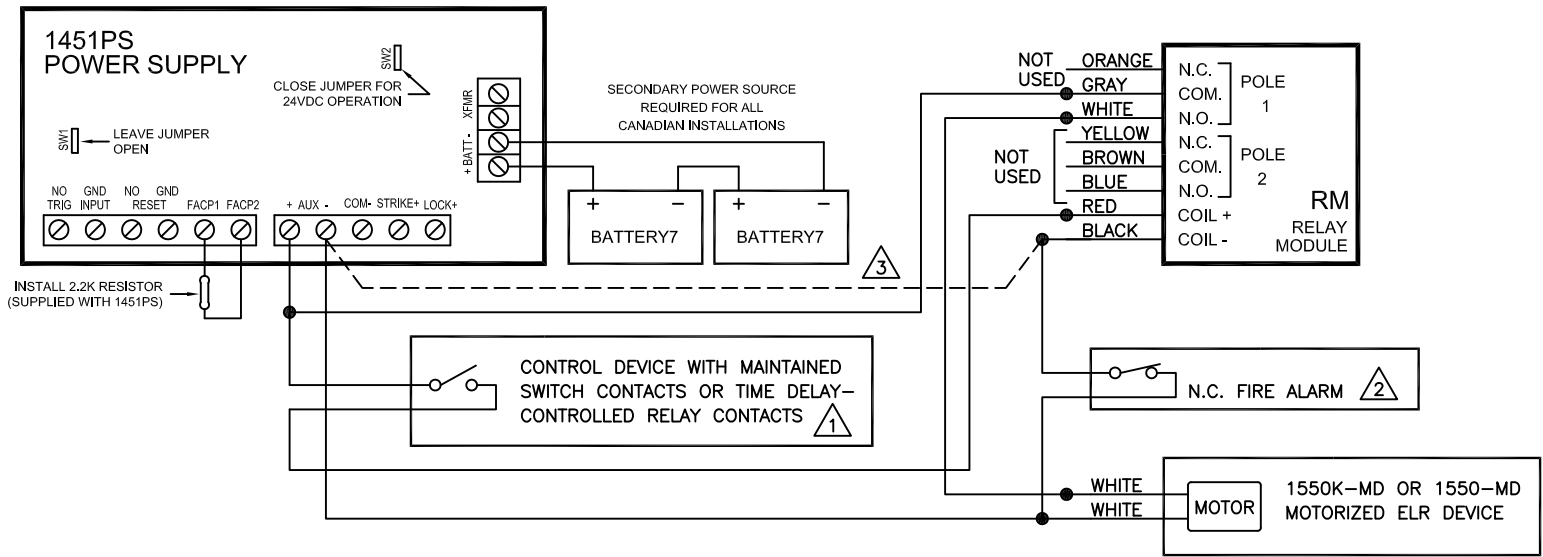
④ WIRE GAUGE	MAX. LENGTH 2-COND. CABLE
22 AWG	70 FEET
20 AWG	110 FEET
18 AWG	180 FEET
16 AWG	280 FEET
14 AWG	450 FEET
12 AWG	720 FEET

RISER DIAGRAM FOR STANDARD ACCESS CONTROL WITH MAINTAINED ELECTRIC LATCH RETRACTION, OR MOMENTARY RETRACTION BY CONTROL DEVICES WITH BUILT-IN TIME DELAY, USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

ACSI SUPPLIED EQUIPMENT:

- ① SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELECTRIC LATCH RETRACTION
- ② SERIES 1100 POWER TRANSFER HINGE
- ③ 1451PS POWER SUPPLY
- ④ RM RELAY MODULE
NOTE: DO NOT LOCATE MORE THAN 10 FT. FROM POWER SUPPLY

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.005 ANGULAR ±1°		DRILL +.007 DRILL -.001 REAM +.001 REAM -.000 PUNCH +.004 PUNCH -.001				
	DESCRIPTION ACSI P/N 1451 ELR ACCESS CONTROL	DRAWING NO. REF 6039-1	MATERIAL 	DATE 2/6/15	REV. RELEASED	APPRV. CRH	SCALE N
			DRAWN BY CRH	DATE 2/6/15			
			SHEET 1 OF 1	APPRV. BY CRH	DATE 2/6/15		
DO NOT SCALE THIS DRAWING							

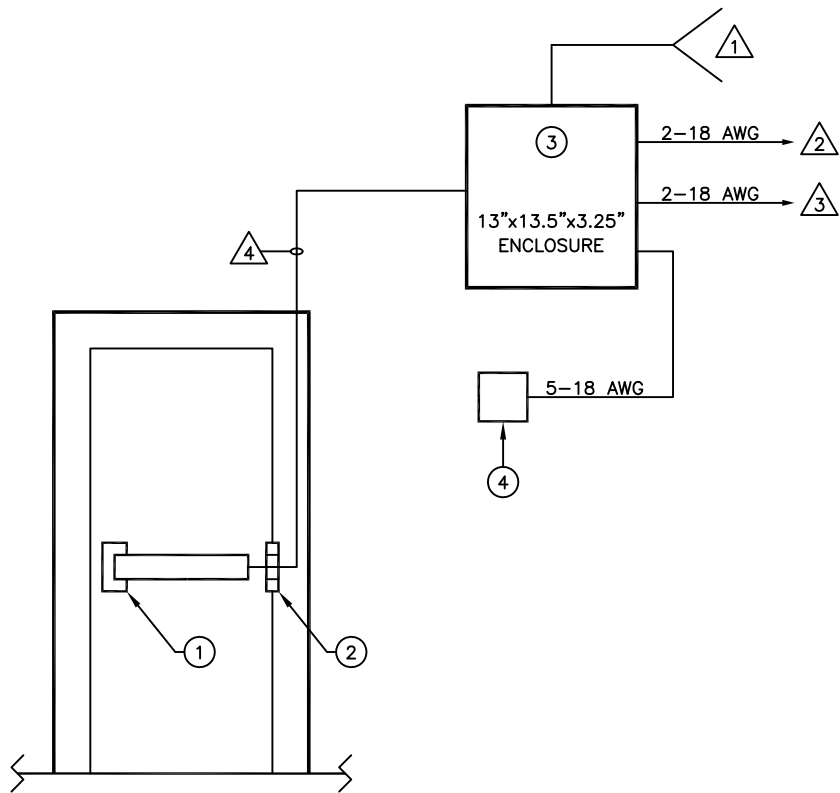


POINT-TO-POINT WIRING DIAGRAM
 STANDARD ACCESS CONTROL WITH MAINTAINED ELECTRIC
 LATCH RETRACTION, OR MOMENTARY RETRACTION BY
 CONTROL DEVICES WITH BUILT-IN TIME DELAY, USING
 SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

NOTES:

- 1 LATCHBOLT IS PROJECTED WITH SWITCH IN OPEN POSITION, AS SHOWN. CLOSING SWITCH CONTACTS WILL RETRACT LATCHBOLT.
- 2 A FIRE ALARM CONDITION WILL IMMEDIATELY PROJECT THE LATCHBOLT WHEN CURRENTLY RETRACTED.
- 3 IF FIRE ALARM IS NOT REQUIRED, CONNECT A WIRE BETWEEN THE COIL NEGATIVE (-) OF RELAY RM AND THE AUXILIARY OUTPUT NEGATIVE (-) TERMINAL (SHOWN AS DOTTED LINE).

ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.005 ANGULAR ±1°	DRILL +.007 +.001 REAM -.000 PUNCH +.004 -.001			
	DESCRIPTION ACSI P/N 1451 ELR ACCESS CONTROL	DRAWING NO. REF 6039-P1	MATERIAL	2/3/15 DATE	RELEASED REV.
			SCALE <i>TL</i> SHEET 1 OF 1	DRAWN BY CRH APPRV. BY CRH	DATE 2/3/15 DATE 2/3/15
DO NOT SCALE THIS DRAWING					



NOTES:


- ① TO 115V., 60HZ., 15A SERVICE.
- ② TO N.C. FIRE ALARM, IF REQUIRED.
- ③ TO A MOMENTARY PUSHBUTTON OR KEY SWITCH FOR TIMED MOMENTARY DOOR CONTROL USING THE TM TIMER MODULE'S FIELD-ADJUSTABLE TIME DELAY.

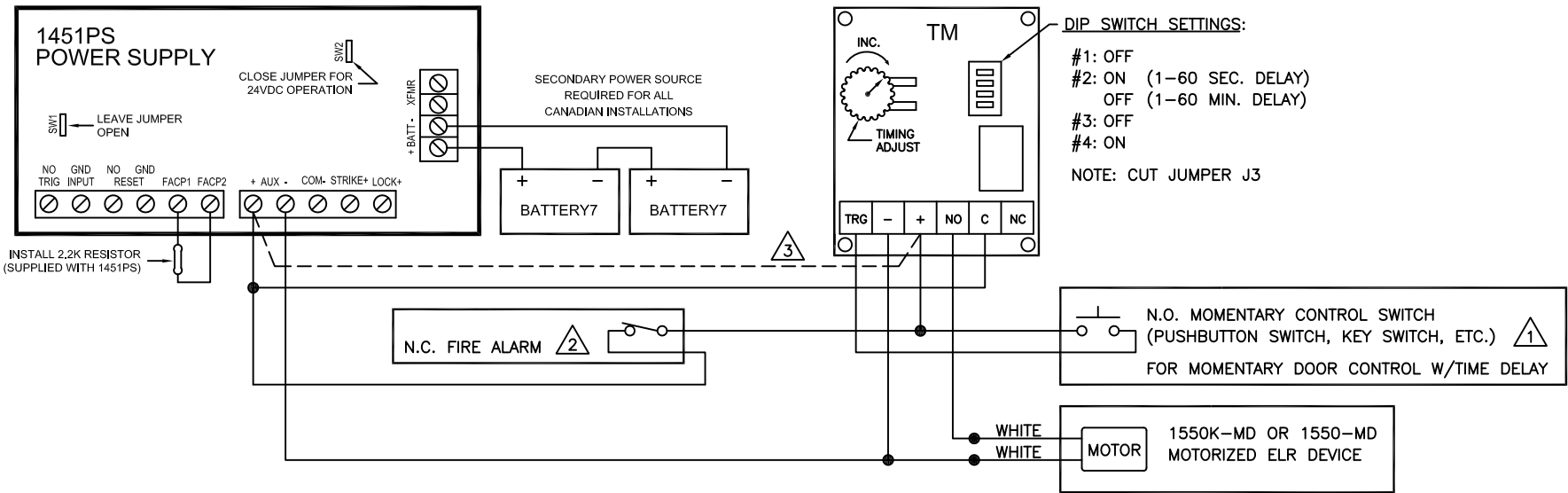
④ WIRE GAUGE	MAX. LENGTH 2-COND. CABLE
22 AWG	70 FEET
20 AWG	110 FEET
18 AWG	180 FEET
16 AWG	280 FEET
14 AWG	450 FEET
12 AWG	720 FEET

RISER DIAGRAM FOR STANDARD ACCESS CONTROL WITH FIELD-ADJUSTBLE TIME DELAY USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

ACSI SUPPLIED EQUIPMENT:

- ① SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELECTRIC LATCH RETRACTION
- ② SERIES 1100 POWER TRANSFER HINGE
- ③ 1451PS POWER SUPPLY
- ④ TM TIMER MODULE
NOTE: DO NOT LOCATE MORE THAN 10 FT. FROM POWER SUPPLY

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.005 ANGULAR ±1°	DRILL +.007 -.001 +.001 REAM -.000 +.004 PUNCH -.001			
			2/6/15	RELEASED	CRH
DESCRIPTION ACSI P/N 1451-TD ELR ACCESS CONTROL			DRAWING NO. REF 6039-R2		MATERIAL
SCALE <i>N</i>			DRAWN BY CRH		DATE 2/6/15
SHEET 1 OF 1			APPRV. BY CRH		DATE 2/6/15
DO NOT SCALE THIS DRAWING					

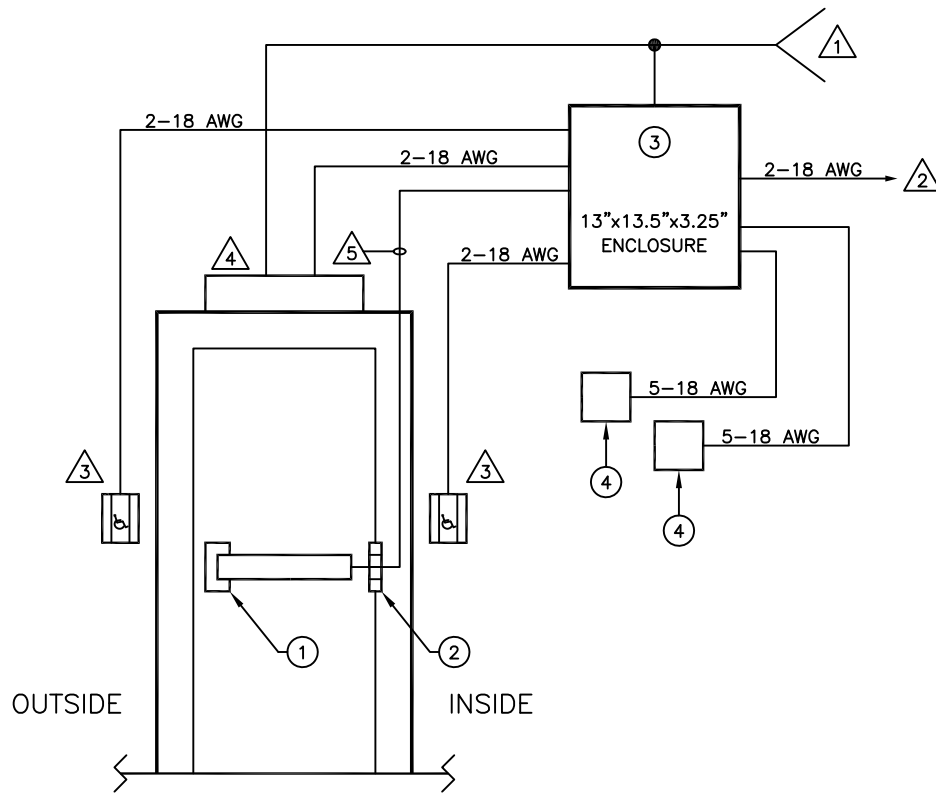


POINT-TO-POINT WIRING DIAGRAM
 STANDARD ACCESS CONTROL WITH
 FIELD-ADJUSTABLE TIME DELAY USING SERIES
 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

NOTES:

- 1 LATCHBOLT IS NORMALLY PROJECTED. A MOMENTARY CLOSURE OF SWITCH CONTACTS WILL RETRACT LATCHBOLT. DEVICE'S LATCHBOLT WILL REMAIN RETRACTED FOR PERIOD OF TIME AS DETERMINED BY SETTING OF ADJUSTMENT WHEEL ON TM TIMER MODULE AND TIME RANGE DIP SWITCH SETTING (SECONDS OR MINUTES). LATCHBOLT PROJECTS AFTER DELAY PERIOD TIMES OUT.
- 2 A FIRE ALARM CONDITION WILL IMMEDIATELY PROJECT LATCHBOLT (WHEN CURRENTLY RETRACTED) AND RESET TIMER MODULE.
- 3 IF FIRE ALARM IS NOT REQUIRED, CONNECT A WIRE BETWEEN THE POSITIVE (+) TERMINAL OF TIMER TM AND THE AUXILIARY OUTPUT POSITIVE (+) TERMINAL (SHOWN AS DOTTED LINE).

ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.005 ANGULAR ±1°		+.007 DRILL -.001 +.001 REAM -.000 +.004 PUNCH -.001		
	DESCRIPTION ACSI P/N 1451-TD ELR ACCESS CONTROL	DRAWING NO. REF 6039-P2	MATERIAL	DATE 2/4/15	RELEASED REV. CRH
SCALE <i>TL</i>			DRAWN BY CRH	DATE 2/4/15	
SHEET 1 OF 1			APPRV. BY CRH	DATE 2/4/15	
DO NOT SCALE THIS DRAWING					



NOTES:


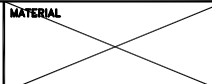
- ① TO 115V., 60HZ., 15A SERVICE.
- ② TO N.C. FIRE ALARM, IF REQUIRED.
- ③ WALL SWITCH
- ④ AUTOMATIC DOOR OPERATOR
- ⑤

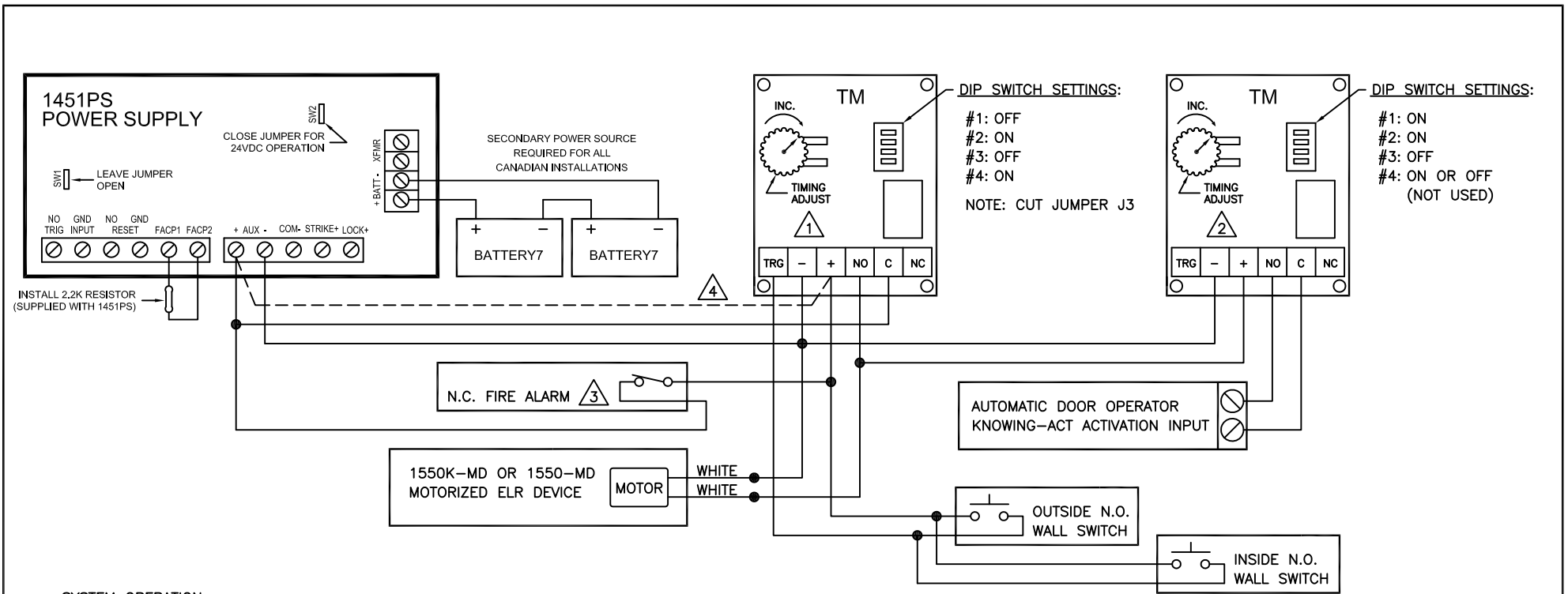
WIRE GAUGE	MAX. LENGTH 2-COND. CABLE
22 AWG	70 FEET
20 AWG	110 FEET
18 AWG	180 FEET
16 AWG	280 FEET
14 AWG	450 FEET
12 AWG	720 FEET

**RISER DIAGRAM FOR STANDARD AUTOMATED
DOOR OPENING SYSTEM APPLICATION USING SERIES
1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES**

ACSI SUPPLIED EQUIPMENT:

- ① SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELECTRIC LATCH RETRACTION
- ② SERIES 1100 POWER TRANSFER HINGE
- ③ 1451PS POWER SUPPLY
- ④ TM TIMER MODULE
NOTE: DO NOT LOCATE MORE THAN 10 FT. FROM POWER SUPPLY

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.005 ANGULAR ±1°		+.007 DRILL -.001 +.001 REAM -.000 +.004 PUNCH -.001		
	DESCRIPTION ACSI P/N 1451-AO ELR ACCESS CONTROL	DRAWING NO. REF 6039-R3	MATERIAL 	2/6/15 DATE	RELEASED REV.
SCALE <i>N</i>			DRAWN BY CRH	DATE 2/6/15	
SHEET 1 OF 1			APPRV. BY CRH	DATE 2/6/15	
DO NOT SCALE THIS DRAWING					



SYSTEM OPERATION:

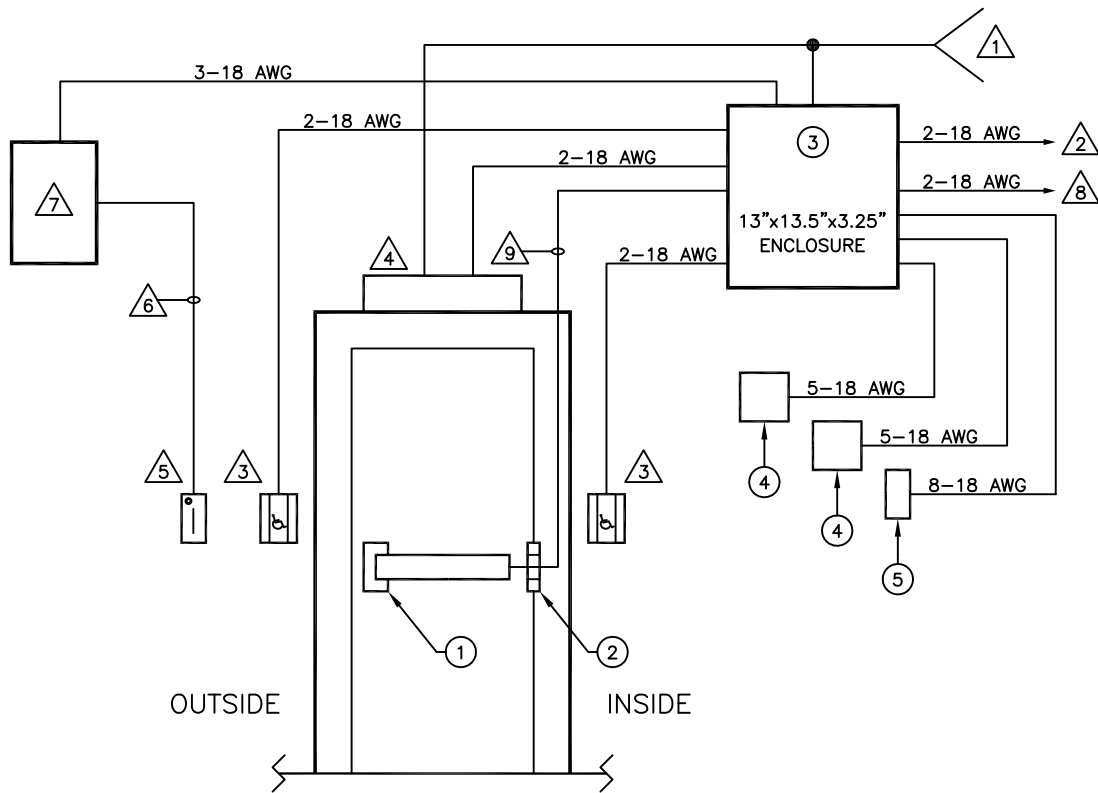
OUTSIDE OR INSIDE WALL SWITCH SEQUENTIALLY RETRACTS LATCHBOLT AND ACTIVATES AUTOMATIC DOOR OPERATOR.

NOTES:

- 1 ADJUST LATCH RETRACTION DELAY TIMER FOR 3-5 SEC. TO ENSURE LATCHBOLT IS FULLY RETRACTED BEFORE AUTO OPERATOR OPENS DOOR, AND TO ENSURE DOOR WILL LATCH WHEN IT CLOSES.
- 2 ADJUST AUTO OPERATOR DELAY-BEFORE-ACTIVATE TIMER FOR 1-2 SEC. TO ALLOW ENOUGH TIME FOR LATCHBOLT TO FULLY RETRACT BEFORE OPERATOR IS ACTIVATED. NOTE: THE "TRG" TERMINAL IS NOT USED WITH THIS TIMER.
- 3 A FIRE ALARM CONDITION WILL IMMEDIATELY PROJECT LATCHBOLT (WHEN CURRENTLY RETRACTED), DISABLE USE OF WALL SWITCHES AND RESET TIMER MODULES.
- 4 IF FIRE ALARM IS NOT REQUIRED, CONNECT A WIRE BETWEEN THE POSITIVE (+) TERMINAL OF LATCH RETRACTION DELAY TIMER TM AND THE AUXILIARY OUTPUT POSITIVE (+) TERMINAL (SHOWN AS DOTTED LINE).

**POINT-TO-POINT WIRING DIAGRAM
STANDARD ACCESS CONTROL WITH AUTOMATIC DOOR OPERATOR
USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES**

	ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.005 ANGULAR ±1°	+.007 DRILL -.001 +.001 REAM -.000 +.004 PUNCH -.001		
	DESCRIPTION ACSI P/N 1451-AO ELR ACCESS CONTROL	DRAWING NO. REF 6039-P3	MATERIAL		
			2/4/15	RELEASED	CRH
			DATE	REV.	APPRV.
SCALE <i>N</i>	DRAWN BY CRH	DATE 2/4/15			
SHEET 1 OF 1	APPRV. BY CRH	DATE 2/4/15			
DO NOT SCALE THIS DRAWING					



NOTES:


- ① TO 115V., 60HZ., 15A SERVICE.
 - ② TO N.C. FIRE ALARM, IF REQUIRED.
 - ③ WALL SWITCH
 - ④ AUTOMATIC DOOR OPERATOR
 - ⑤ CARD READER UNIT
 - ⑥ CARD READER POWER/DATA CABLE
 - ⑦ CARD ACCESS CONTROL UNIT CONTAINING DOOR CONTROL RELAY RESPONDING TO CARD READER SWIPE FOR MOMENTARY AUTHORIZED ENTRY (NIGHT MODE)
 - ⑧ ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT (TIME CLOCK, COMPUTER-CONTROLLED TIME SCHEDULE, ETC.)
 - ⑨ WIRE GAUGE MAX. LENGTH 2-COND. CABLE
- | | |
|--------|----------|
| 22 AWG | 70 FEET |
| 20 AWG | 110 FEET |
| 18 AWG | 180 FEET |
| 16 AWG | 280 FEET |
| 14 AWG | 450 FEET |
| 12 AWG | 720 FEET |

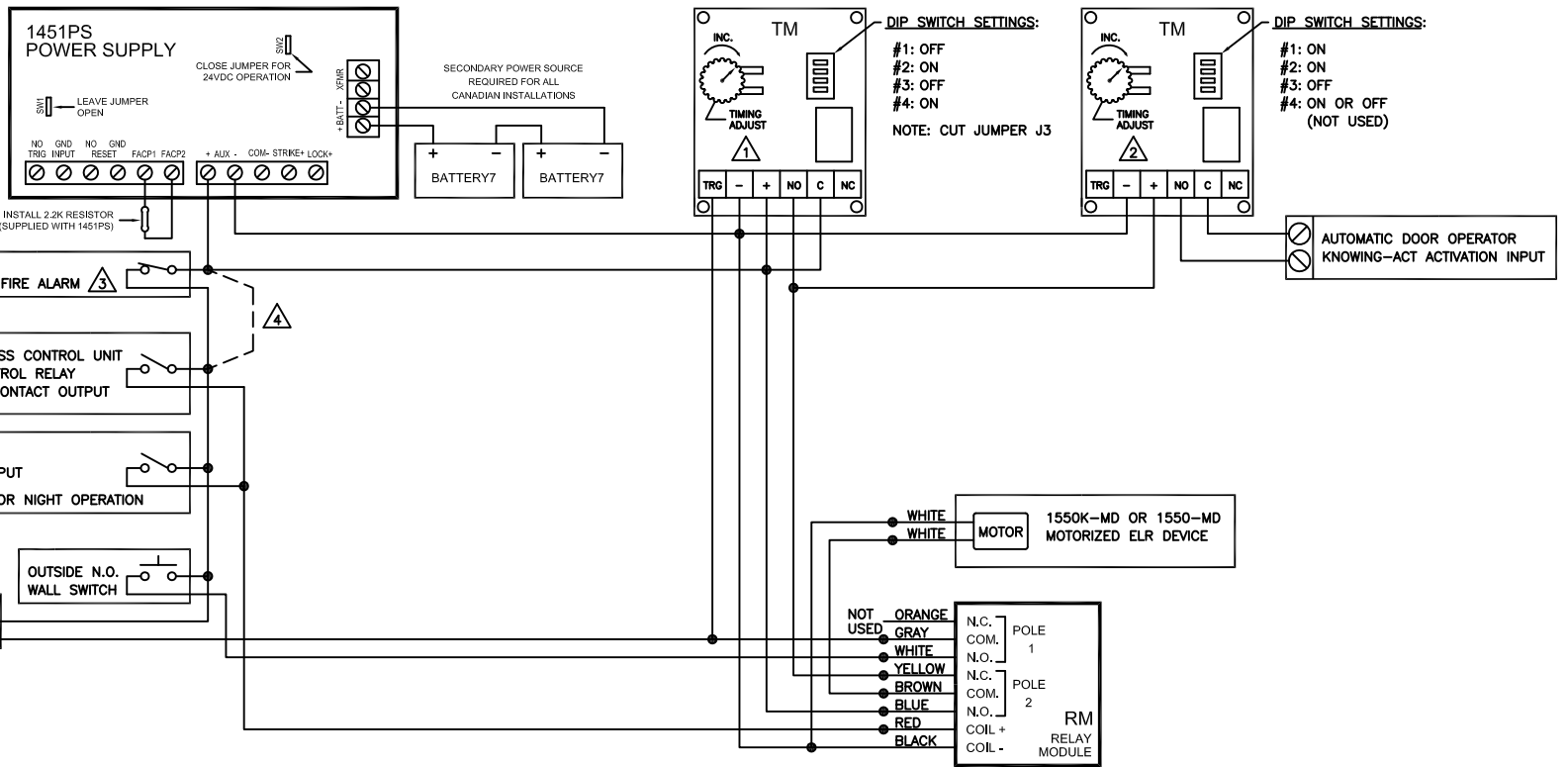
**RISER DIAGRAM FOR DAY/NIGHT AUTOMATED
DOOR OPENING SYSTEM APPLICATION USING SERIES
1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES**

ACSI SUPPLIED EQUIPMENT:

- ① SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELECTRIC LATCH RETRACTION
- ② SERIES 1100 POWER TRANSFER HINGE
- ③ 1451PS POWER SUPPLY
- ④ TM TIMER MODULE*
- ⑤ RM RELAY MODULE*

*DO NOT LOCATE MORE THAN 10 FT. FROM POWER SUPPLY

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.005 ANGULAR ±1°	+.007 DRILL -.001 +.001 REAM -.000 +.004 PUNCH -.001			
			2/6/15	RELEASED	CRH
DESCRIPTION	DRAWING NO.	MATERIAL	DATE	REV.	APPRV.
ACSI P/N 1451-DN ELR ACCESS CONTROL	REF 6039-R4		SCALE <i>TL</i>	DRAWN BY CRH	DATE 2/6/15
			SHEET 1 OF 1	APPRV. BY CRH	DATE 2/6/15
DO NOT SCALE THIS DRAWING					



SYSTEM OPERATION:

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR DAY OPERATION (DRY CONTACTS CLOSED), THE LATCHBOLT WILL RETRACT. PUSHING THE OUTSIDE OR INSIDE WALL SWITCH WILL ACTIVATE THE AUTOMATIC DOOR OPERATOR.

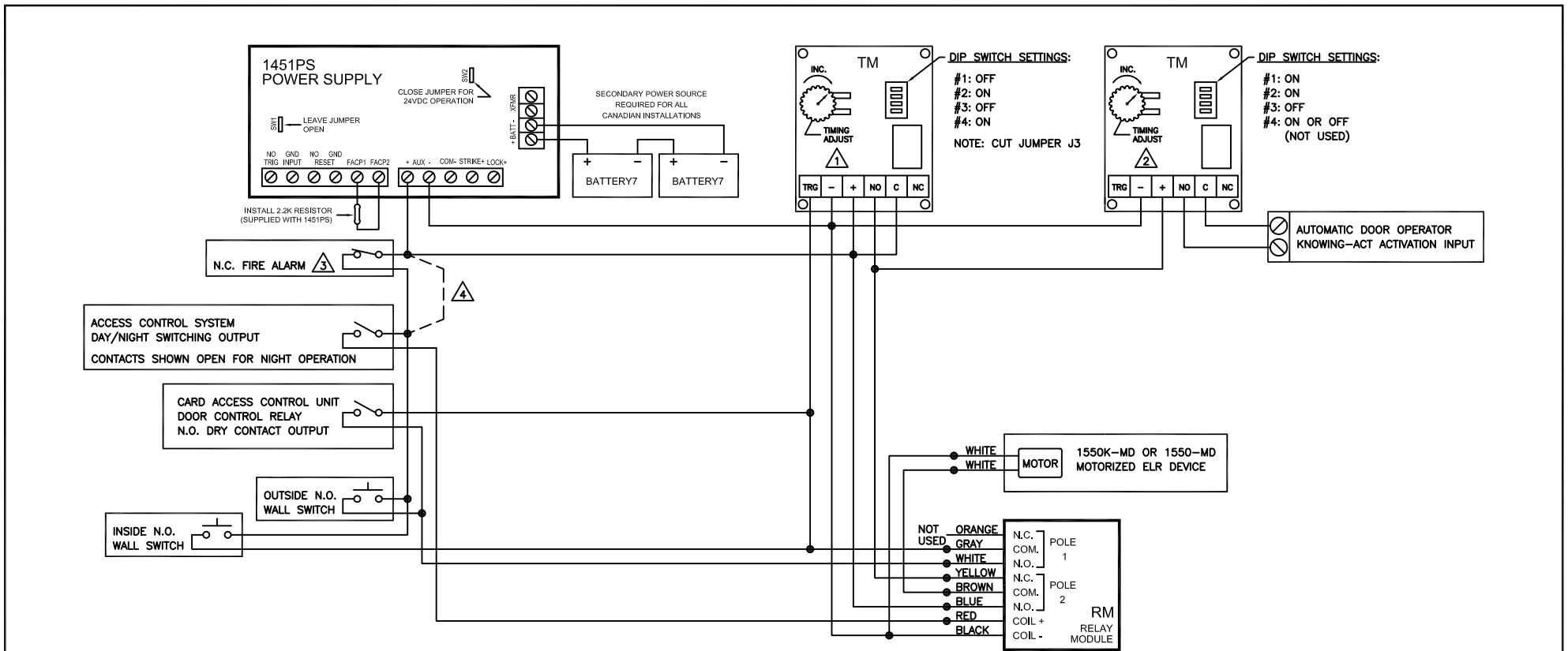
WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR NIGHT OPERATION (DRY CONTACTS OPEN), THE LATCHBOLT WILL PROJECT AND THE OUTSIDE WALL SWITCH BECOMES DISABLED. A VALID SWIPE FROM THE CARD READER WILL TEMPORARILY RETRACT THE LATCHBOLT. WHILE THE CARD READER IS IN ITS ACTIVATED STATE, THE OUTSIDE WALL SWITCH IS ENABLED FOR ACTIVATING THE AUTOMATIC DOOR OPERATOR. THE INSIDE WALL SWITCH IS ALWAYS ENABLED IN NIGHT MODE AND WILL SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR.

NOTES:

- 1. ADJUST LATCH RETRACTION DELAY TIMER FOR 3-5 SEC. TO ENSURE LATCHBOLT IS FULLY RETRACTED BEFORE AUTO OPERATOR OPENS DOOR, AND TO ENSURE DOOR WILL LATCH WHEN IT CLOSSES.
- 2. ADJUST AUTO OPERATOR DELAY-BEFORE-ACTIVATE TIMER FOR 1-2 SEC. TO ALLOW ENOUGH TIME FOR LATCHBOLT TO FULLY RETRACT BEFORE OPERATOR IS ACTIVATED. NOTE: THE "TRG" TERMINAL IS NOT USED WITH THIS TIMER.
- 3. A FIRE ALARM CONDITION OCCURRING WHILE IN DAY MODE WILL IMMEDIATELY PROJECT LATCHBOLT AND DISABLE USE OF OUTSIDE AND INSIDE WALL SWITCHES. WHEN A FIRE ALARM CONDITION OCCURS IN NIGHT MODE, LATCHBOLT WILL REMAIN PROJECTED, AND BOTH OUTSIDE AND INSIDE WALL SWITCHES WILL BECOME DISABLED. NOTE: IF A FIRE ALARM OCCURS AT THE BEGINNING OF A DOOR OPEN CYCLE, THE SYSTEM APPLICATION WILL ALLOW THE OPENING CYCLE TO BE COMPLETED BEFORE DISABLING LATCH RETRACTION AND USE OF BOTH WALL SWITCHES.
- 4. IF FIRE ALARM IS NOT REQUIRED, CONNECT ONE SIDE OF THE CARD ACCESS RELAY OUTPUT, ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT, OUTSIDE WALL SWITCH AND INSIDE WALL SWITCH (ALL SHOWN BUSSED TOGETHER) TO THE AUXILIARY OUTPUT POSITIVE (+) TERMINAL (SHOWN AS DOTTED LINE).

POINT-TO-POINT WIRING DIAGRAM
 DAY/NIGHT APPLICATION - VARIATION #1
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION 1/64 DECIMAL ± .008 ANGULAR ±°		DRILL -.001 REAM -.001 PUNCH -.004			
	DESCRIPTION	DRAWING NO.	MATERIAL	SCALE	DRAWN BY	DATE
	ACSI P/N 1451-DN ELR ACCESS CONTROL	REF 6039-P4-1		2/5/15	CRH	2/5/15
				SHEET 1 OF 1	APPRV. BY CRH	DATE 2/5/15
DO NOT SCALE THIS DRAWING						



SYSTEM OPERATION:

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR DAY OPERATION (DRY CONTACTS CLOSED), THE LATCHBOLT WILL RETRACT. PUSHING THE OUTSIDE OR INSIDE WALL SWITCH WILL ACTIVATE THE AUTOMATIC DOOR OPERATOR.

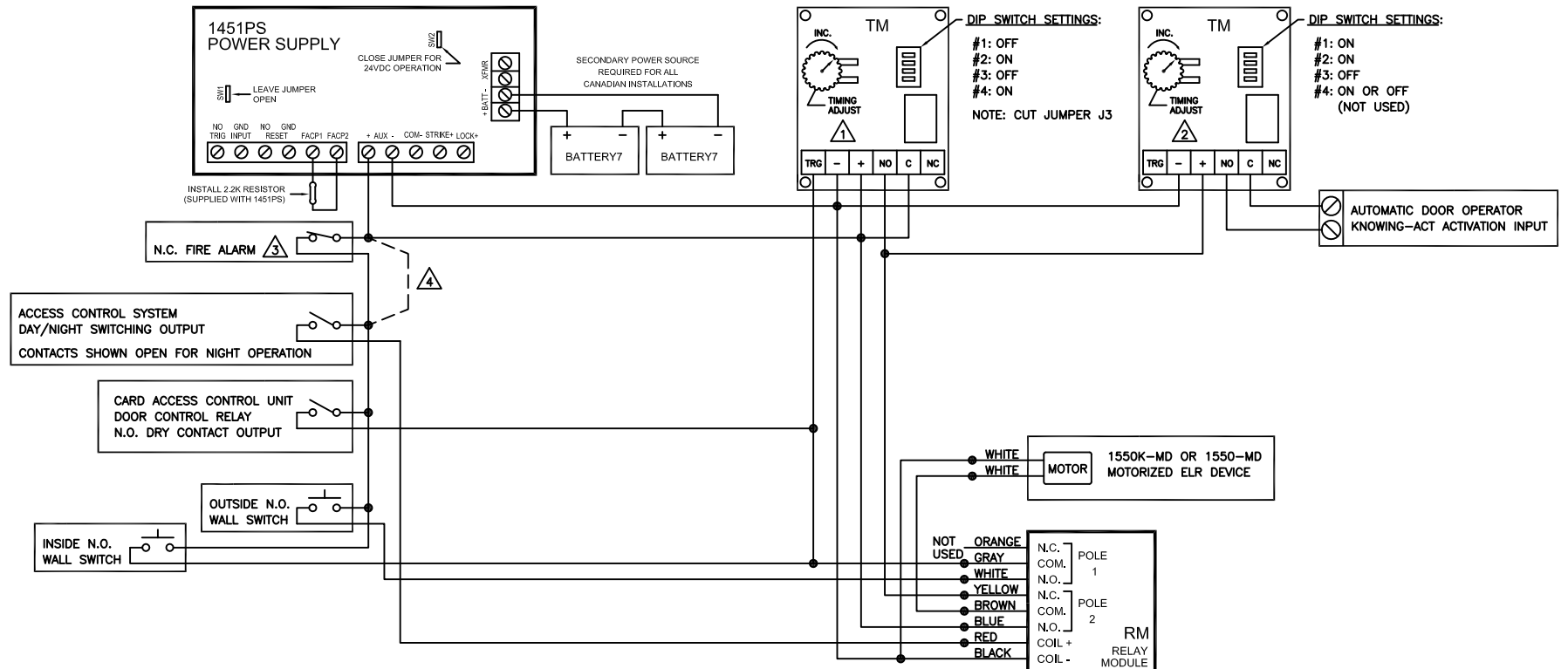
WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR NIGHT OPERATION (DRY CONTACTS OPEN), THE LATCHBOLT WILL PROJECT AND THE OUTSIDE WALL SWITCH BECOMES DISABLED. A VALID SWIPE FROM THE CARD READER WILL TEMPORARILY ENABLE THE OUTSIDE WALL SWITCH TO SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR. THE INSIDE WALL SWITCH IS ALWAYS ENABLED IN NIGHT MODE AND WILL SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR.

NOTES:

- 1. ADJUST LATCH RETRACTION DELAY TIMER FOR 3-5 SEC. TO ENSURE LATCHBOLT IS FULLY RETRACTED BEFORE AUTO OPERATOR OPENS DOOR, AND TO ENSURE DOOR WILL LATCH WHEN IT CLOSES.
- 2. ADJUST AUTO OPERATOR DELAY-BEFORE-ACTIVATE TIMER FOR 1-2 SEC. TO ALLOW ENOUGH TIME FOR LATCHBOLT TO FULLY RETRACT BEFORE OPERATOR IS ACTIVATED. NOTE: THE "TRG" TERMINAL IS NOT USED WITH THIS TIMER.
- 3. A FIRE ALARM CONDITION OCCURRING WHILE IN DAY MODE WILL IMMEDIATELY PROJECT LATCHBOLT AND DISABLE USE OF OUTSIDE AND INSIDE WALL SWITCHES. WHEN A FIRE ALARM CONDITION OCCURS IN NIGHT MODE, LATCHBOLT WILL REMAIN PROJECTED, AND BOTH OUTSIDE AND INSIDE WALL SWITCHES WILL BECOME DISABLED. NOTE: IF A FIRE ALARM OCCURS AT THE BEGINNING OF A DOOR OPEN CYCLE, THE SYSTEM APPLICATION WILL ALLOW THE OPENING CYCLE TO BE COMPLETED BEFORE DISABLING LATCH RETRACTION AND USE OF BOTH WALL SWITCHES.
- 4. IF FIRE ALARM IS NOT REQUIRED, CONNECT ONE SIDE OF THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT, OUTSIDE WALL SWITCH AND INSIDE WALL SWITCH (ALL SHOWN BUSSED TOGETHER) TO THE AUXILIARY OUTPUT POSITIVE (+) TERMINAL (SHOWN AS DOTTED LINE).

POINT-TO-POINT WIRING DIAGRAM
 DAY/NIGHT APPLICATION - VARIATION #2
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION 1/64 DRILL -.001 DECIMAL .008 REAM -.001 ANGULAR ±1° PUNCH -.001				
	DESCRIPTION ACSI P/N 1451-DN ELR ACCESS CONTROL	DRAWING NO. REF 6039-P4-2	MATERIAL	DATE 2/5/15	RELEASED CRH
SCALE 1/4" = 1" SHEET 1 OF 1			DRAWN BY CRH	DATE 2/5/15	DO NOT SCALE THIS DRAWING



SYSTEM OPERATION:


WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR DAY OPERATION (DRY CONTACTS CLOSED), THE LATCHBOLT WILL RETRACT. PUSHING THE OUTSIDE OR INSIDE WALL SWITCH WILL ACTIVATE THE AUTOMATIC DOOR OPERATOR.

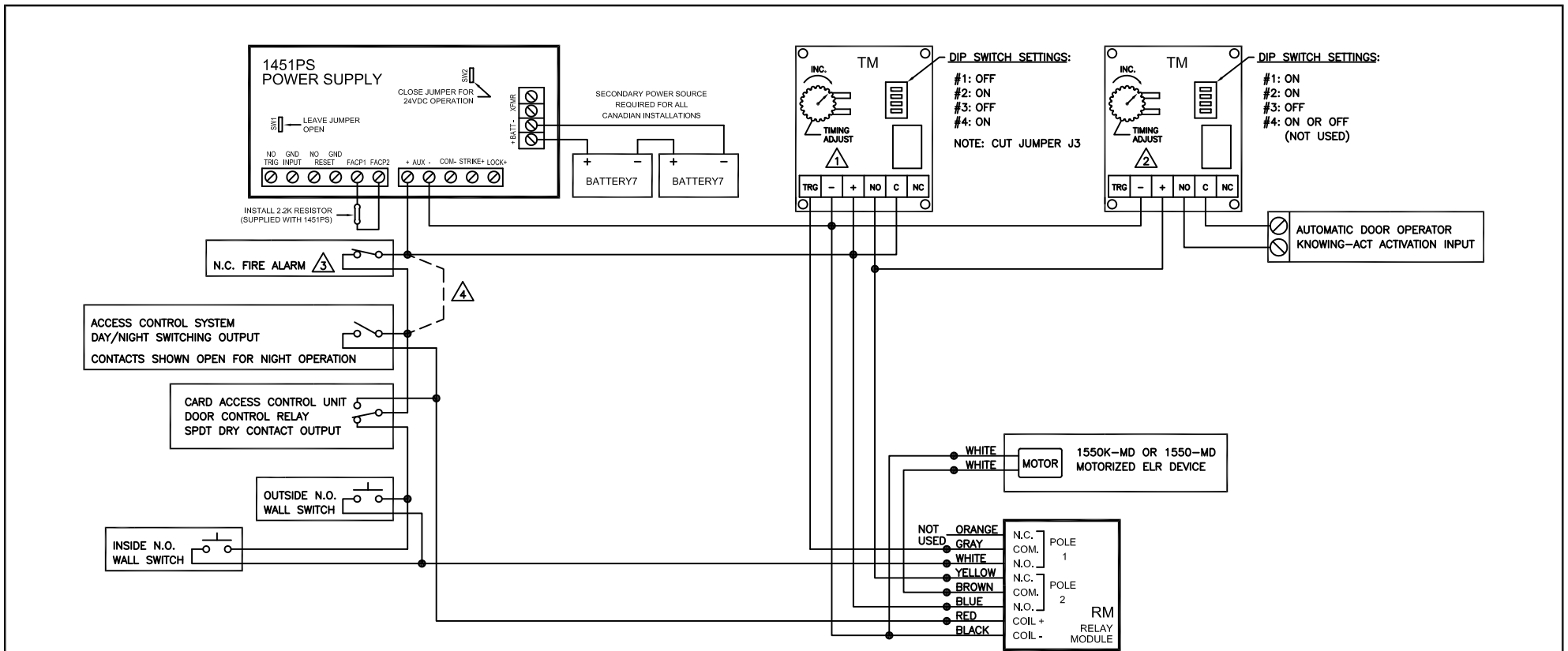
WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR NIGHT OPERATION (DRY CONTACTS OPEN), THE LATCHBOLT WILL PROJECT AND THE OUTSIDE WALL SWITCH BECOMES DISABLED. A VALID SWIPE FROM THE CARD READER WILL SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR. THE INSIDE WALL SWITCH IS ALWAYS ENABLED IN NIGHT MODE AND WILL SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR.

NOTES:

- 1. ADJUST LATCH RETRACTION DELAY TIMER FOR 3-5 SEC. TO ENSURE LATCHBOLT IS FULLY RETRACTED BEFORE AUTO OPERATOR OPENS DOOR, AND TO ENSURE DOOR WILL LATCH WHEN IT CLOSSES.
- 2. ADJUST AUTO OPERATOR DELAY-BEFORE-ACTIVATE TIMER FOR 1-2 SEC. TO ALLOW ENOUGH TIME FOR LATCHBOLT TO FULLY RETRACT BEFORE OPERATOR IS ACTIVATED. NOTE: THE "TRG" TERMINAL IS NOT USED WITH THIS TIMER.
- 3. A FIRE ALARM CONDITION OCCURRING WHILE IN DAY MODE WILL IMMEDIATELY PROJECT LATCHBOLT AND DISABLE USE OF OUTSIDE AND INSIDE WALL SWITCHES. WHEN A FIRE ALARM CONDITION OCCURS IN NIGHT MODE, LATCHBOLT WILL REMAIN PROJECTED, AND BOTH OUTSIDE AND INSIDE WALL SWITCHES WILL BECOME DISABLED. NOTE: IF A FIRE ALARM OCCURS AT THE BEGINNING OF A DOOR OPEN CYCLE, THE SYSTEM APPLICATION WILL ALLOW THE OPENING CYCLE TO BE COMPLETED BEFORE DISABLING LATCH RETRACTION AND USE OF BOTH WALL SWITCHES.
- 4. IF FIRE ALARM IS NOT REQUIRED, CONNECT ONE SIDE OF THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT, CARD ACCESS RELAY OUTPUT, OUTSIDE WALL SWITCH AND INSIDE WALL SWITCH (ALL SHOWN BUSSED TOGETHER) TO THE AUXILIARY OUTPUT POSITIVE (+) TERMINAL (SHOWN AS DOTTED LINE).

POINT-TO-POINT WIRING DIAGRAM
 DAY/NIGHT APPLICATION - VARIATION #3
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION 1/64 DRILL ±.001 DECIMAL ±.008 REAM ±.005 ANGULAR ±1° PUNCH ±.004				
	DESCRIPTION ACSI P/N 1451-DN ELR ACCESS CONTROL	DRAWING NO. REF 6039-P4-3	MATERIAL	DATE 2/6/15	RELEASED CRH
SCALE 1/4" = 1" SHEET 1 OF 1			DRAWN BY CRH	DATE 2/6/15	APPRV. BY CRH
DO NOT SCALE THIS DRAWING					



SYSTEM OPERATION:

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR DAY OPERATION (DRY CONTACTS CLOSED), THE LATCHBOLT WILL RETRACT. PUSHING THE OUTSIDE OR INSIDE WALL SWITCH WILL ACTIVATE THE AUTOMATIC DOOR OPERATOR.

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR NIGHT OPERATION (DRY CONTACTS OPEN), THE LATCHBOLT WILL PROJECT AND BOTH THE OUTSIDE AND INSIDE WALL SWITCHES BECOME DISABLED. A VALID SWIPE FROM THE CARD READER WILL ONLY RETRACT THE LATCHBOLT. THE DOOR MUST BE PULLED OPEN MANUALLY FOR ENTRY OR PUSHED OPEN MANUALLY FOR EXITING.

NOTES:

- 1. ADJUST LATCH RETRACTION DELAY TIMER FOR 3-5 SEC. TO ENSURE LATCHBOLT IS FULLY RETRACTED BEFORE AUTO OPERATOR OPENS DOOR, AND TO ENSURE DOOR WILL LATCH WHEN IT CLOSES.
- 2. ADJUST AUTO OPERATOR DELAY-BEFORE-ACTIVATE TIMER FOR 1-2 SEC. TO ALLOW ENOUGH TIME FOR LATCHBOLT TO FULLY RETRACT BEFORE OPERATOR IS ACTIVATED. NOTE: THE "TRG" TERMINAL IS NOT USED WITH THIS TIMER.
- 3. A FIRE ALARM CONDITION OCCURRING WHILE IN DAY MODE WILL IMMEDIATELY PROJECT LATCHBOLT AND DISABLE USE OF OUTSIDE AND INSIDE WALL SWITCHES. WHEN A FIRE ALARM CONDITION OCCURS IN NIGHT MODE, LATCHBOLT WILL REMAIN PROJECTED, AND BOTH OUTSIDE AND INSIDE WALL SWITCHES WILL BECOME DISABLED. NOTE: IF A FIRE ALARM OCCURS AT THE BEGINNING OF A DOOR OPEN CYCLE, THE SYSTEM APPLICATION WILL ALLOW THE OPENING CYCLE TO BE COMPLETED BEFORE DISABLING LATCH RETRACTION AND USE OF BOTH WALL SWITCHES.
- 4. IF FIRE ALARM IS NOT REQUIRED, CONNECT ONE SIDE OF THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT AND CARD ACCESS RELAY OUTPUT (BOTH SHOWN BUSSED TOGETHER) TO THE AUXILIARY OUTPUT POSITIVE (+) TERMINAL (SHOWN AS DOTTED LINE).

POINT-TO-POINT WIRING DIAGRAM
 DAY/NIGHT APPLICATION - VARIATION #4
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION 1/64 DRILL ±.001 DECIMAL ±.008 REAM ±.001 ANGULAR ±° PUNCH ±.004				
	DESCRIPTION ACSI P/N 1451-DN ELR ACCESS CONTROL	DRAWING NO. REF 6039-P4-4	MATERIAL	DATE 2/6/15	RELEASED CRH
SCALE 1/4" = 1" SHEET 1 OF 1			DRAWN BY CRH	DATE 2/6/15	DATE 2/6/15
DO NOT SCALE THIS DRAWING					