

# DZS SERIES

## MULTIPURPOSE CONTROLS

### 1, 2 OR 4 CHANNEL

365 DAY ADVANCE SINGLE HOLIDAY AND SEASONAL SCHEDULING WITH ASTRONOMIC FEATURE

**DZS100BP**  
**DZS200BP**  
**DZS400BP**



- APPLICATIONS**
- HVAC Equipment
  - Horns, Bells
  - Interior Lighting
  - Electric Motors

- Outdoor Lighting and signs
- Refrigeration defrost control: Condensers, Heaters

**SPECIAL FEATURES!**

**SUPERCAPACITOR BACKUP!**

**PERMANENT SCHEDULE RETENTION**

**MEMORY MODULE** can be programmed at any one location and inserted into another DZS series unit with MM socket in any other location!

**MM**

**COPY FEATURE:** Unit can be configured to copy program schedule to multiple memory modules!

(OPTIONAL) Windows-based program and **MEMORY MODULE PROGRAMMER (MMP)** can be used to program the memory module.

**optional MMP**

**MEMORY MODULE PROGRAMMER (MMP) OPTIONAL**



Capable of different schedules each day of the week

**ON & OFF SET POINTS:** 99 per week, minimum setting is one minute.

**ASTRONOMIC OFFSET:** 299 minutes

MEETS CALIFORNIA ENERGY COMMISSION'S TITLE 24 REQUIREMENTS

and **ASHRAE 90.1 1999**

**FEATURES**

**DISPLAY:** LCD

**ASTRONOMIC:**

1. Adjustable 10°-60° Northern or Southern latitudes
2. Can be individually offset +/- 1-299 minutes from both sunset and sunrise times.

**HOLIDAYS:** 1 to 24 individual dates

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM or military time

**COPY FEATURE:** Unit can be configured to copy program schedule to multiple memory modules

**SIGNAL/PULSE DURATION:** 2 different setting per channel: each 1-99 seconds.

**POWER OUTAGE BACKUP:** Permanent Schedule Retention: Supercapacitor maintains real time.

**SPECIFICATIONS**

**TIMING ACCURACY:** Line Frequency

**OPERATING TEMPERATURE:**

-40 to +158°F (-40° to +70°C.)

**POWER CONSUMPTION:**

DZS100/200BP: 5VA max

DZS400BP: 6VA max

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA 3R standard.

**OTHER MOUNTINGS:**

Metal Indoor: add suffix Y

Metal Indoor/Outdoor – NEMA 3R: add suffix O

Flush with lock and key: add suffix FLG

Bracket mounting – specify mechanism only with bracket

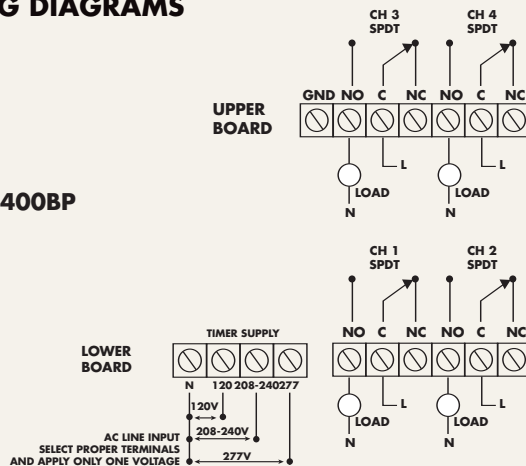
CATALOG NO	UPC CODE	TYPE	VOLTAGE (VAC)	DRY CONTACTS (UNPOWERED)
DZS100BP	82182	1 CHANNEL	120/(208-240)/277	DPDT
DZS200BP	82183	2 CHANNEL	120/(208-240)/277	SPDT
DZS400BP	82184	4 CHANNEL	120/(208-240)/277	SPDT
MMP	82181	MEMORY MODULE PROGRAMMER	120V	(includes software)

Units are available in: 12VDC: add suffix "12" 24VAC: add suffix "24"

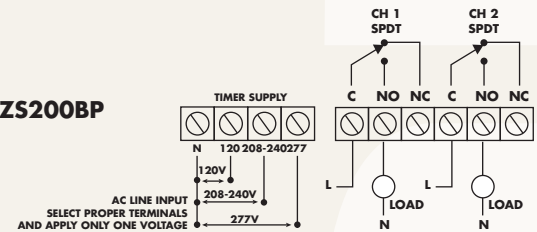
DZS100BP, DZS200BP				DZS400BP		
TYPE	VOLTAGE	RATING		TYPE	VOLTAGE	RATING
		NO	NC			
Ballast	120VAC	20A	10A	General Purpose	24-277VAC, 30VDC	10A
	208-277VAC	10A	3A			
Tungsten	120-277VAC	5A	3A	Tungsten	120VAC	360 watts
	277VAC	12A	6A			
General Purpose	24-240VAC	20A	10A	Pilot Duty	120-277VAC	360VA
	277VAC	12A	6A			
Pilot Duty	120-240VAC	470VA	275VA	Motor Load	120VAC	1/2HP
	277VAC	690VA				
Motor Load	120VAC	1HP	1/2HP	Motor Load	208-240VAC	1/2HP
	208-240VAC	2HP	1/2HP			
	277VAC	1HP				
Resistive	28VDC	20A	10A			

## WIRING DIAGRAMS

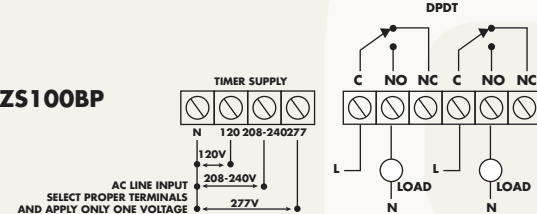
DZS400BP



DZS200BP



DZS100BP



## SPECIFICATION WRITER'S GUIDE

### DZS SERIES

- Furnish and install where noted a 4 (2) (1) channel digital time switch with portable Memory Module on front panel.
- Memory Module shall be capable of being programmed at any one location and inserted into DZS100BP, 200BP, 400BP Series (with memory module socket) in any other remote location.
- Optional programmer shall be available (Model MMP), capable of accomplishing Windows based settings on a PC for easy duplication of Memory Modules or individualized programs for multiple locations
- Unit shall have copy feature: Can be configured to copy program schedules from one memory module to another without use of the optional memory module programmer.
- Controller shall program in AM/PM (12 hour) or Military (24 hour) formats.
- Controller shall program in one minute resolution.
- Display shall be of LCD type.
- Controller shall be capable of 99 set points; separate scheduling for each day of the week.
- Controller shall have 365 day holiday capabilities with 24 single dates and 4 seasons of unlimited duration.
- Different daily schedules shall be programmable within each season.
- Controller shall have Daylight Saving or Standard time.
- Controller shall have automatic Leap Year correction.
- Controller shall have Permanent Schedule Retention.
- Controller shall have 100 hours backup for real time with built in supercapacitor.
- Controller shall be capable of manual override ON or OFF to the next scheduled event using 1 button for each channel.
- Unit shall have NEMA Type 3 indoor/outdoor enclosure as standard.
- Controller shall be capable of having 2 different pulse durations 1-99 seconds, user settable and assignable to each channel.
- Controller shall be capable of having astronomic on one (or all) channels with 1-299 minutes, plus or minus offset from Sunrise or Sunset.
- Controller shall be capable of being configured to copy to multiple memory modules.
- To order specify TORK Model DZS100BP (DZS200BP) (DZS400BP).

# 40 AMP CONTACTORS

FOR INCREASED VOLTAGE AND/OR  
AMPERAGE SWITCHING - 3PST

**5440**  
**5401**  
**5441**

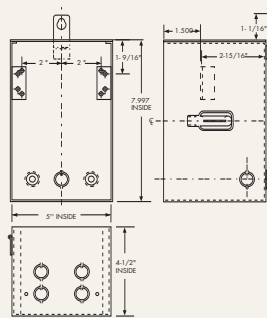
CATALOG NO	UPC CODE	COIL VOLTS	NO. OF CONTACTORS
5440	81002	24	4
5401	81021	120	1
5441	81022	120	4

Can switch up to 40 Amps per pole from 120VAC to 480VAC, one or two circuits simultaneously. Can be wired close to or remote from controller. Use for lighting loads, exhaust fans, electric heaters, hot water heaters, refrigeration, ambient defrosting.

## 5401 REMOTE CONTACTOR

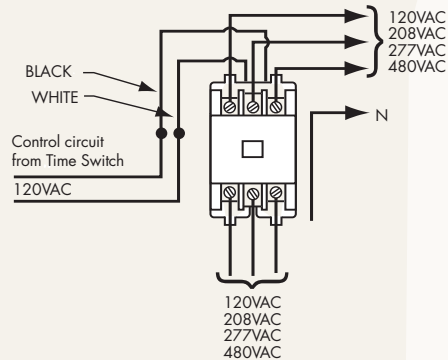


### DIMENSIONS



## WIRING DIAGRAMS

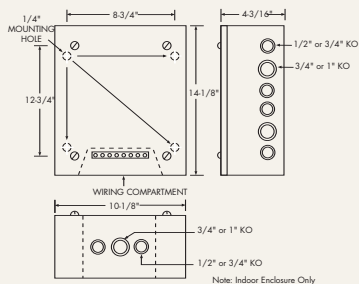
### 5401



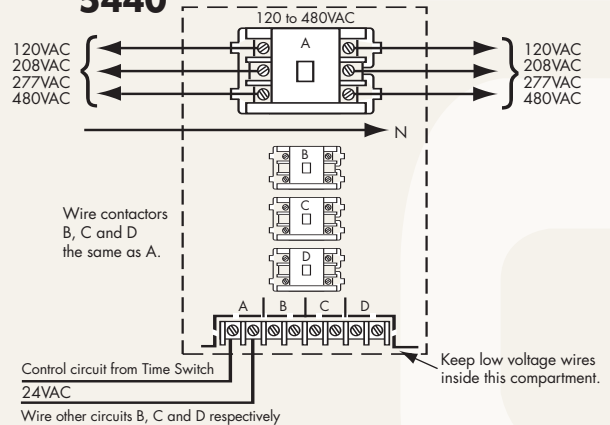
## 5440 AND 5441 REMOTE CONTACTORS



### DIMENSIONS



### 5440



### 5441

