

# 7.0 Electrical & Air-conditioning

**Electrical:** This section is based on the electrical requirements of the Chowpatty showroom and actual requirements may vary from dealership to dealership.

**Power distribution:**

■ The total connected load of the premises is 50.00 KW with following break-up:

a. Lighting	20.00 KW
b. Air-conditioning	22.00 KW
c. Computers	2.00 KW
d. Raw power	5.00 KW
e. Turn table (If provided/Optional)	1.00 KW
<b>Total</b>	<b>50.00 KW</b>

■ The incomer supply is provided by the local electric supply company up to the meter room and subsequent distribution is vehicleried out using a MCB distribution board segregating the loads as per the above break-up.

■ Additional power factor correction capacitors of mixed dielectric type are used to ensure a PF of above 0.9

■ All cabling are with PVC insulated, armoured cables. Those aluminum conductors are used for those above 6 sq.mm and copper for those below 6 sq.mm.

■ All wiring are with smoke free, temperature stable PVC conduits above the false ceiling with copper wires.

**Lighting:** The lighting is predominantly based on the interior design and should have an average illumination level of around 300 Lux using 36W Daylight fluorescent lights. Additional following type accent lights are used to enhance the ambience / highlight specific areas or objects:

- a. 120W PAR 38 lamp up lighters for wall lighting
- b. 50W, 12V halogen fittings for the windows
- c. 150W halogen lights with ban doors for focusing on to the posters.
- d. Provision for 70W metal halide fittings for vehicle display.

Please refer to the lighting chart provided for more detailed clarification

Programmable timers are proposed for the following lights while the rest are controlled by switches:

- a. Window halogen lights from 6 PM to 11.00 PM
- b. Wall up lighters and 70W metal halide fittings to switch off at 11.00 PM.

The timers are digitally programmable on a weekly basis and could be adjusted as per requirements and the season.



### Suggested showroom lighting pattern

#### Daytime

##### 10.00 A.M. to 5.00 P.M.

Ambient lights (lights in the niche)	OFF
Wall lights	OFF
Lights on the posters	ON
Window halogens	OFF
Signage	OFF

##### 5.00 P.M.- 9.00 P.M.

Ambient lights (lights in the niche)	ON
Wall lights	ON
Lights on the posters	OFF
Window halogens	ON
Signage	ON

##### 9.00 P.M.-12.00 Midnight

Ambient lights (lights in the alternate niche)	ON
Wall lights	OFF
Lights on the posters	ON
Window halogens	OFF
Signage	ON

### Low voltage system

- Data / voice networking has been taken to every office work table and reception etc.
- The power to the computer socket outlets through online UPS with 15 min. back-up, which is sized on the basis of 250W/computer.
- For background piped music, speakers are housed behind the return air grille.
- Cable TV provision has been given in the customer lounge area.
- Microprocessor based single zone fire alarm panel with ionization type smoke detectors are provided for fire detection.

### Earthing

- Two earth pits are provided for the general power and dedicated one for computer and EPBAX.

### Air-conditioning

- The total heat load requirements will vary from dealership to dealership. The estimated heat load for Chowpatty showroom is 14.0 TR and to cater for the same, 2 nos. 7.5 TR ductable split units of Kirloskar Mcquay have been provided.
- For the manager s cabin & office areas (lower level) due to the height restriction, window air-conditioners of 1.0 TR and 1.5 TR capacities are used respectively.
- The indoor condition is to be designed for a temperature of 74°F with a humidity of 50-55% and outdoor summer of 96°F.

## Lighting

### Light fixtures

**Area:**

Tube lights in niches in main Car display area

**Type of fitting:**

Mirror optic 2 x 36W fitting

**Type of tube:**

Day light tube lights

**Company:**

Philips

**Area:**

Spot lights in niches

**Type of fitting:**

Metal halides, RL 676/B

**Company:**

Artlite

**Area:**

Lights to focus on posters

**Type of fitting:**

Halogen baan light, 747/B

**Type of tube:**

150W halogen tubes

**Company:**

Artlite

**Area:**

Canopy lights / window lighting

**Type of fitting:**

Fixed eye-ball spot lights, RL 725

**Type of tube:**

50W halogen bulb

**Company:**

Artlite

**Area:**

Wall element lighting (inside)

**Type of fitting:**

Par lamps

**Type of bulbs:**

Par 38

**Company:**

Osram / Philips

**Area:**

General lighting in meeting area

**Type of fitting:**

PL spot lights (circular), Riva mini

**Type of tube:**

9W PL tubes - Daylight

**Company:**

Gemini Global

**Area:**

Pantry, AHU, Store, etc.

**Type of fitting:**

Normal tube light

**Type of tube:**

40W White colour tube lights

**Company:**

Philips

**Area:**

General lighting in administration area

**Type of fitting:**

2x10W Mirror optic PL fittings, (square type)

**Type of tube:**

10W PL tubes - Daylight

**Company:**

Approved make

**Area:**

Floor lights to light screen

**Type of fitting:**

Sunset concealed floor lights

**Type of tube:**

50W halogen bulb

**Company:**

Gemini Global