

Low Voltage Distribution Board for Utilities  
**Dunes U Series**



[www.alhamad.ae](http://www.alhamad.ae)



*Plugged into your needs*

# **Al Hamad is the leading manufacturing enterprise specialized in Low voltage to Medium voltage electrical products.**

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Headquartered in Abu Dhabi, UAE, the company covers entire MENA region and provide expert solutions in view of the local environment, requirements and necessities.

With an extensive experience of more than 2 decades and a thorough knowledge on Low and Medium voltage products, the team at Al Hamad understand the increased demands of the products in upcoming years and worked collaboratively

to manufacture and provide high quality solutions in utilities and many industrial applications.

*The team is dedicated to providing Electrical Solutions to multiple sectors including utilities, Oil & Gas, Defense & infrastructure segment.*



## SAFE AND RELIABLE POWER DISTRIBUTION

Whether in infrastructure, industrial plants, residential or high-rise buildings all of these developments depend on the reliable supply of electrical power normally provided by the power supply organization or utility. The function of a Low Voltage “mains” utility distributor is to provide service connections (underground cable or overhead line) to a number of consumers along its route.

**Al Hamad Switchgear** (a division of Al Hamad Industries International) provides all of the various LVAC Panels, Flange Connected Feeder Pillars, Feeder Pillar type A & B plus Service Cabinet and Control Panels for street lighting to facilitate the very important supply links in utility supply networks.

The Dunes series of Utility Network Boards and Pillars are designed by Al Hamad Switchgear and type tested to the latest IEC 61439 international standards at test laboratories (typically DEKRA / KEMA) in Europe specifically for the intense climatic and environmental conditions found in the Middle East.

The Dunes U series of utility distribution boards and feeder pillars was type tested with either, circuit breakers, isolators or strip fuse units, in line with the specific type of distribution board or feeder pillar, to adhere to the utility specification and are all approved and pre-qualified at the utility for network distribution applications.

As a competent and reliable local partner, we offer utilities proven solutions from a local original equipment designer and manufacturer plus comprehensive support in line with the utilities aim of providing continuity of supply to their many consumers in the region.

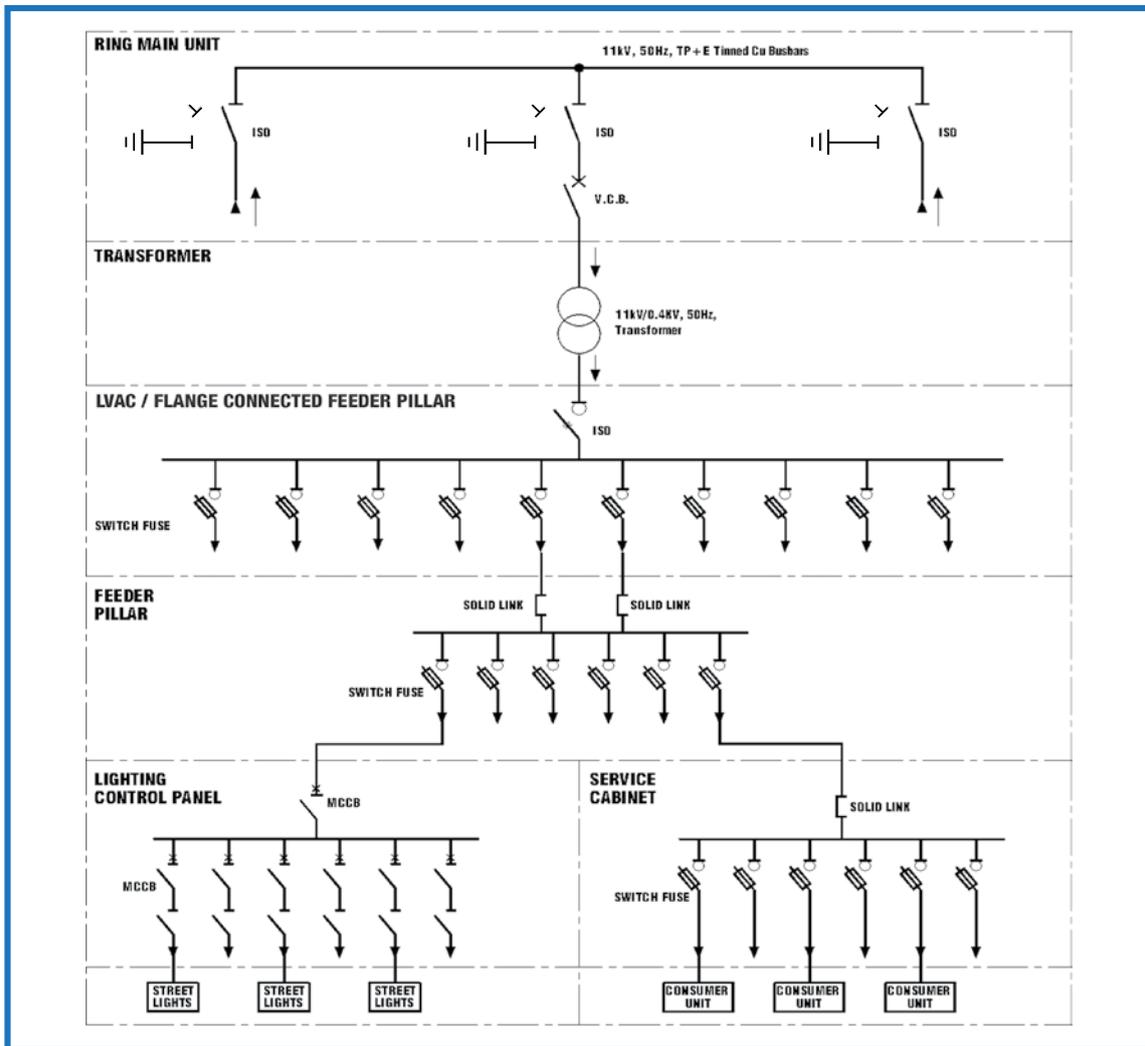
**The Dunes U series** of distribution boards and feeder pillars are a type tested assembly (TTA), suited for most utility network power supply applications especially secondary distribution due to the robust design and functional ratings at ambient temperatures, ensuring a reliable and safe supply of power.

With the DUNES series of distribution boards and feeder pillars you can rely upon high quality, safety and flexibility, thus covering every installation requirement in the field of low-voltage power distribution, whether in utility networks, industrial applications, infrastructure, residential or high-rise buildings.

### DUNE U series - TECHNICAL DATA

Description		Up to 3000A LVAC Distribution Boards & Feeder Pillars	
Standards		TYPE TESTED ASSEMBLY (TTA) DEKRA (Former KEMA quality, The Netherlands)	IEC 61439-2 (2011)
Electrical data	Rated Voltage	Rated Insulation Voltage (Ui)	1000V
		Rated Voltage (Un)	690V
		Rated Operational Voltage (Ue)	415V
		Rated Impulse Withstand Voltage (Uimp)	upto 8kV
		Rated Frequency	up to 60Hz
		Rated Operational Frequency (fn)	50Hz
	Rated Current*	Main Busbar (InA)	up to 3000A
		Rated current (InC): IP43 @ Ambient Temperature	up to 3000A
		Busbar Rated Short-Time Withstand Current (Icw)	up to 50kA (3s)
		Busbar Rated Peak Withstand Current (Ipk)	105kA
Mechanical characteristics	Dimensions	Enclosure	DIN sizes
		Height	up to 2100mm
		Panel Width	up to 6500mm
		Depth	up to 800mm
	Degrees of Protection	According to IEC 60529 and IEC 61439-2 Clause 10.3	External up to IP54
	Steel Components	Enclosure body	2 / 3mm
		Door	1.5 / 2mm
	Surface protection/ Paint	Enclosure body	Zinc-Electro plate coated
		Door	Zinc-Electro plate coated
		Powder coated	RAL 7032
	Busbar system	Flat Tin Plated Busbars	Insulated
	Insulation materials	Resistance of insulating materials to abnormal heat, in conformity with IEC 61439-2, clause 10.2.3.2	
	Temperature-rise	Passed in conformity with IEC 61439-2, clause 10.10.2.3.5, at normal ambient temperature and additionally at 40°C ambient	Upto 50°C Ambient
Distribution Board	Operational Conditions	Usage/Installation Location	Indoors / Outdoors
		Environmental Conditions (Micro-Environment)	Pollution Degree 3
		Relative Humidity @ 40°C	100%
		Ambient Temperature (24h mean value)	35°C
		Altitude above sea level	up to 2000 m

## Power Distribution Diagram



## DEKRA / KEMA & UL Certification for LV Panels...



## SPECIFICATIONS



### LVAC PANELS

Application	Utility Networks
Operational Conditions	Indoor
Incomer	Isolator
Outgoing feeders	Strip Fuse Switch Units
Rated Current	Upto 2700A
Optional	CT Terminal Box on both sides



### LVAC DISTRIBUTION BOARDS

Application	VIP Area Substations
Operational Conditions	Indoor
Incomer	Air Circuit Breaker
Outgoing feeders	Moulded Case Circuit Breakers
Rated Current	Upto 2700A

***“Low voltage power distribution solutions, type tested internationally but designed and manufactured locally to meet local applications.”***



### FLANGE CONNECTED FEEDER PILLARS

Application	Utility Package Substations
Operational Conditions	Outdoor / Indoor
Incomer	Isolator
Outgoing feeders	Strip Fuse Switch Units
Rated Current	1000A, 1800A & 3000A



### FEEDER PILLAR TYPE-A & TYPE-B

Application	Utility Distributions
Operational Conditions	Outdoor
Incomer	Strip Fuse Switch Unit with Knife Blade
Outgoing feeders	Strip Fuse Switch Units with Fuse Links
Rated Current	800A-6WAYS & 800A-8WAYS



<b>SERVICE CABINET</b>	
Application	Utility Distributions
Operational Conditions	Outdoor
Incomer	Strip Fuse Switch Unit with Knife Blade
Outgoing feeders	Strip Fuse Switch Units with Fuse Links
Rated Current	400A



<b>STREET LIGHTING CONTROL PANEL</b>	
Application	Street Lighting controls
Operational Conditions	Outdoor
Incomer	Moulded Case Circuit Breaker
Outgoing feeders	MCCB with POWER CONTACTORS
Rated Current	400A
Enclosure	GRP



# ALHAMAD

## SWITCHGEAR

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