



MAXWELL ELECTRICAL ASIA LIMITED  
美基电器亚洲有限公司

LOW VOLTAGE CONTROL PANEL  
AND  
LOCAL MOTOR CONTROL PANEL  
低压控制屏及就地马达控制屏



**Maxwell Electrical Asia Limited**

Unit A1,2/F., Kin Hing Industrial Building,  
No. 17-23, Shek Kin Street, Kwai Chung,  
N.T., Hong Kong  
Tel: (852)3583 5088 Fax: (852)3583 5089  
Email: sales@maxwell-asia.com  
web-site: www.maxwell-asia.com

**美基电器亚洲有限公司**

香港新界葵涌石建街17-23号建兴工业大厦2楼A1室  
电话:(852)3583 5088  
传真:(852)3583 5089  
电邮: sales@maxwell-asia.com  
网址:www.maxwell-asia.com

The design, specifications and components stated in this brochure are subject to change without prior notice.

MEA/Pub10/JAN16/Rev.0



Testing &  
Certification  
Australia





# CONTENT

# 目录

# CONTENTS

➤ Introduction	公司简介	2
➤ Control Panel (LMCP)	就地控制屏	3
➤ Product List	产品类别	4
➤ ASTA Type Test	ASTA型式测试	5
➤ Technical Specification	技术规范	6
➤ Typical Motor Starting Circuit	典型马达起动线路图	7
➤ Major Components	主要组件	8
➤ Sales and After Sales Service	销售及售后服务	9
➤ Job Reference	项目参考	10

## Introduction

Maxwell Electrical Asia Limited (MEA) is managed by a professional team who has extensive experience in the design, manufacture, T & C as well as maintenance of low voltage switchboard, motor control centre and local control panel.

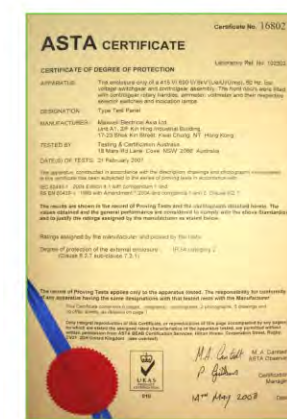
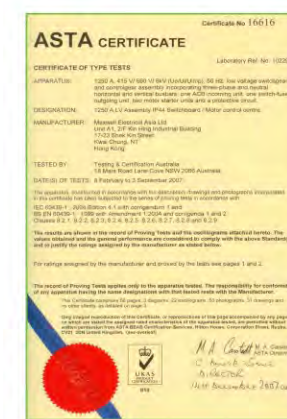
MEA has recently developed a completed range of type tested switchboard and motor control system to cover almost the whole spectrum of low voltage application from the main power switchboard down to the small motor control or process control panel.



## 公司简介

美基电器亚洲有限公司（下称 MEA）由一批对低压开关柜、马达控制中心和就地控制屏的设计生产拥有丰富经验的工程技术人员管理。

MEA于近年开发了一系列已通过型式试验的低压开关柜、马达控制系统、适用于主配电以及小型的控制屏的整个低压范畴。





## 1. Local Motor Control Panel

MEA also supplies a wide range of local motor control panel, design & build to individual customer's specification. Over the years, high reputation on our engineering competence, good workmanship, timely delivery and swift response to after sales service call and on site modification has been established.

These panels are mostly custom built to specific requirement and specification. In general, the metal housings are manufactured from heavy gauge galvanized sheet steel with ingress protection to IP54 in accordance with BSEN / IEC 60529 and finished with light grey epoxy powder coating to RAL 7032, other colours are also available.

### Standard features include:

- Neoprene rubber gaskets
- Easy operable door lock
- Panel opening angle exceeds 110 degree

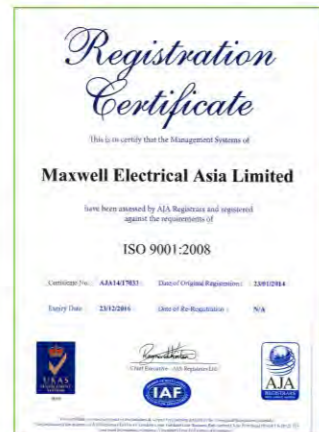
### Standard dimension ranging from:

- Height: 250mm up to 2000mm
- Width: 200mm up to 1500mm
- Depth: 150mm up to 600mm

## 2. Stainless Steel Enclosure

MEA also supplies stainless steel enclosures which are built in accordance with EN10083.

For maximum protection in an adverse environment such as outdoor, highly corrosive, chemical and petrochemical process plant, where coated steel is inappropriate, an austenitic stainless steel grade 304/316 can be adopted.



## 1. 就地控制屏

MEA同时提供一系列的符合客户规范要求设计构造的就地控制屏, 多年来, 我公司的工程技术能力, 及时交货及迅速的售后服务皆得到客户的认同。

大部分此类就地控制屏皆应客户要求生产, 基本上以1.5mm厚的钢板生产, 符合BSEN / IEC 60529 的防护等级为IP54, 颜色为浅灰色RAL 7032, 其他颜色也可按客户要求提供。

### 标准特性包括:

- 防水胶边
- 简易操作门锁
- 柜门开展超过110度

### 标准尺寸:

- 高: 250mm-2000mm
- 宽: 200mm-1500mm
- 深: 150mm-600mm

## 2. 不锈钢箱

MEA亦提供按EN10083生产的不锈钢控制屏, 在高度恶劣环境情况下, 采用304/316等级不锈钢箱能提供更好的防锈保护。

## Motor Control Centre(MCC)/ Motor Control Panel(MCP)

- MVAC System
- Fire Services System
- Plumbing & Drainage System



## 马达控制中心/控制屏

- 空调系统
- 消防系统
- 给排水系统

## Local Control Panel (LCP)

- Genset Synchronizing
- Mimic & Supervisory
- Process & PLC Control
- Water Scrubber Panel



## 就地控制屏

- 发电机同步
- 模拟及监控
- 程式控制
- 水濂控制屏

## ATS Control Panel

- Genset Change Over



## 自动切换屏

- 发电机自动切换

## Power Quality Equipment

- Real Time Power Factor Correction Cubicle
- Tuned or Detuned Capacitor Bank Cubicle
- Active Harmonic Filter Panel
- Passive Harmonic Filter Panel
- Zero Sequence Transformer Panel



## 电源质量设备

- 即时功率因数补偿柜
- 电容补偿柜
- 主动谐波过滤屏
- 被动谐波过滤屏
- 零序变压器屏





## ASTA Type Test

## ASTA型式测试

MEA Local motor control panel is fully tested and certified by ASTA accredited third party testing laboratory and meets the latest IEC 61439-2:Edition 2.0 2011-08 clauses 10.2 to 10.13

MEA 马达控制屏符合最新国际标准并已通过ASTA认可试验所测试符合规范及获发ASTA型式试验证书。

The photos show parts of the type test procedures:



Ingress Protection Test / 防护测试



Temperature Rise Test/温升测试



Short Circuit Test / 短路测试

## Technical Specification

## 技术规范

MEA's low voltage motor control panel has been fully type tested by ASTA accredited independent laboratories and meets the latest international standards as listed below:

MEA的马达控制屏已通过由ASTA认可的独立试验所的一系列型式试验且符合下列最新国际标准。

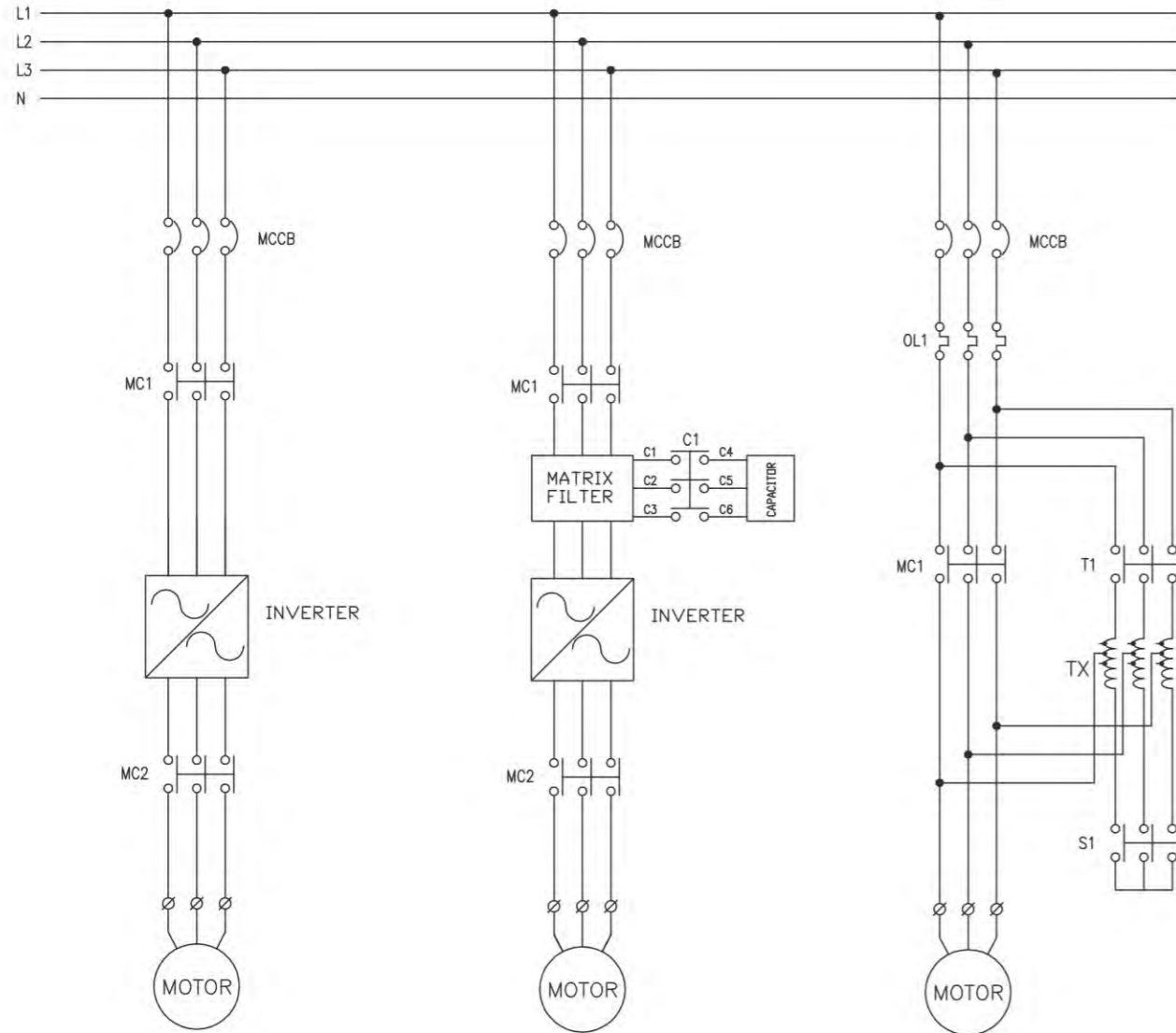
- ※ IEC 61439-2:Edition 2.0
- ※ IEC 60529

Rated insulation voltage 额定绝缘电压	690VAC
Rated impulse withstand voltage 额定脉冲耐受电压	6000VAC
Rated operational voltage 额定工作电压	415V 50 Hz
Rated short time withstand 额定短路耐受电流	40KA rms and 84KA Peak
Degree of protection 外壳防护等级	IP42 / IP44 / IP55
Form of segregation 内部分隔等级	Form 1、2 & 3b
Enclosure material / Finish 柜体柜架材料 / 表面处理	1.5/2.0mm electro galvanized steel / powder coated 1.5至2.0毫米厚电解铁板 / 粉末喷涂
Temperature rise test 温升测试	Complied 合格
Clearance and creepage distance test 间距及爬距测试	Complied 合格
Mechanical operational test 机械动作测试	Complied 合格
Electromagnetic compatibility test 电磁干扰测试	Complied 合格



# Typical Motor Starting Circuit

# 典型马达起动线路图



Inverter  
变频启动

Inverter & Matrix filter  
变频带谐波过滤启动

Autotransformer  
自耦式启动

# Major Components

# 主要组件

Here below are the major components for our ASTA type tested motor control panel. All components will be assessed and reviewed periodically by our technical and service teams to ensure their compliance with standards and price competitiveness.

下列是我公司已通过ASTA型式测试的马达控制屏所使用的主要组件，我公司工程技术人员也会定期检测使用组件，确保它们符合规范要求，并具有价格竞争性。

Enclosure	外壳	:Mild steel/ Stainless steel
MCCB	塑壳开关	:ABB/Schneider
Fuse switch	熔断开关	:ABB/Schneider
Isolator/switch-disconnector	隔离开关	:ABB/Schneider
Power contactor & overload	接触器/热过载	:ABB/Schneider
Pilot device	指示元件	:IDEC/Schneider
Soft- starter	软启动	:ABB/Schneider
Variable frequency inverter	变频器	:Mitsubishi/ ABB
Current transformer	电流互感器	: Nitech
Metering	测量仪表	: Iskra/Saci
Ampere/voltage selector	电流/电压选择开关	: Baco
Timer/control relay	时间/控制继电器	: Omron/IDEC
Multifunction Power Meter	多功能仪表	: Schneider
Passive Harmonic Filter	无源滤波器	: Schaffner





## Sales and After Sales Service

## 销售及售后服务

Through close liaison with our customers and aided by an advanced computer system, our experienced engineers would design the switchboard, motor control centre, and local control panel meeting all aspects of our customer's design intent and the specific site condition; may it be our standard panel or purpose built panel; configure for front or rear access, floor standing or wall mounting.

To provide our customer continued security and peace of mind, all equipment of our supply are subjected to factory routine tests prior to delivery to ensure their compliance to the contractual requirements.

After sales service is an area that MEA has always take pride on, our after sales service team is only a phone call away and they would assist our customer in alteration and addition works for equipments of our supply as well as existing equipments on site.



通过与用户紧密沟通，及以先进计算机辅助，我公司经验丰富的工程师将按客户的需求及现场环境作出适当的开关柜及马达控制中心的设计。

为使客户放心及获得保障，我公司所有产品在出厂前都会在厂房作出一系列的出厂前试验以保证产品符合合同要求。

售后服务是MEA引以为傲的一环，我公司售后服务队伍与客户只是一个电话之隔，他们会全力辅助客户解决在我公司供应设备或现场已装的设备的加改工作。

## Job Reference

## 项目参考

