



MEGA JATI ACADEMY SDN BHD

www.megajatiacademy.com

A Certified Training Provider for MOF, HRDF, CIDB, ST, all trainings by Mega Jati will be awarded supplementary CIDB 10 CCDs daily and ALL Courses are HRDF Claimable.

Theory and Practical Operation of Low Voltage Electrical Equipment: LOW VOLTAGE SYNCRONIZING

TRAINING ID: MJA/ELEC/2020/006

MEGA JATI ACADEMY SDN BHD

Jalan Marikh U5/174,

CB Seksyen U5,

40150 Shah Alam, Selangor

2020

Theory and Practical Operation of Low Voltage Electrical Equipment: **LOW VOLTAGE SYNCHRONIZING**

TRAINING ID: MJA/ELEC/2020/006

1.0 INTRODUCTION

The motor torque of the synchronous machine is proportional to the voltage at its terminals, whereas that of the asynchronous machine is proportional to the square of that voltage. Unlike the asynchronous motor, it can work with a power factor equal to one or very close to it. The synchronous motor therefore has a number of advantages over the asynchronous motor with regard to its ability to be powered via the constant voltage/frequency line supply:

- 1) The speed of the motor is constant, regardless of the load.
- 2) It can supply reactive power and increase the power factor of an installation.
- 3) It can withstand relatively large voltage drops.

However, the synchronous motor supplied directly by the constant voltage/frequency line supply has two disadvantages:

- 1) It has starting difficulties. If the motor is not combined with a variable speed drive, starting must be performed at no-load.
- 2) It may stall if the resistive torque exceeds its maximum electromagnetic torque. In this case, the entire start process must be repeated.

(Source: <https://electrical-engineering-portal.com>)

2.0 COURSE OBJECTIVES

The objectives of the course are to extend the knowledge of participants on Practical Operation of Low Voltage Electrical Equipment: LOW VOLTAGE SYNCHRONIZING that important in electrical engineering personnel. The participants will be exposed to the operational of low voltage synchronizing according to the practices and applications. In addition, the basic design of low voltage synchronizing will be elaborated and shared. It will combine both theory and practices in operating, handling, troubleshooting and maintenance of low voltage synchronizing that been used in the industry.

3.0 LANGUAGE & LOCATION:

The course material will be in English and Malay. Lectures will be held at **suitable places once the course is confirmed.**

4.0 COURSE FEE:

NO	METHOD OF PAYMENT	ACCOUNT NAME	BANK	ACCOUNT NUMBER
1.	Cek / <i>Online Transfer</i>	Mega Jati ACADEMY Sdn Bhd	Bank Islam Malaysia Berhad	1427-401000-7241
2.	LO / HRDF	Mega Jati Consult Sdn Bhd	Maybank Banking Berhad	5142-7132-6182
3.	e-Perolehan	Mega Jati Consult Sdn Bhd	Nombor e-Perolehan Pembekal eP-140010377	

For help and further information please contact

1) Account: Miss Ria : 012 349 8656

2) Training: Miss Zahafarina : 017 419 3031

5.0 COURSE OUTLINE



COURSE	LOW VOLTAGE SYNCRONIZING		
DURATION REQUIRED	2 DAYS	LEARNING TIME	16 HOURS
METHOD OF LEARNING	LECTURE, LV WORKSHOP, DESIGN CALCULATION, AUDIO VISUAL PRESENTATION		
CPD AWARDED	CIDB 20 CPD FOR EACH PARTICIPANT / HRDF CLAIMABLE		

TIME		10.30 AM 11.00 AM		12.30 PM 2.30 PM	
DAY	8.30 AM – 10.30 AM		11.00 AM – 12.30 PM		2.30 PM 5.30 PM
FIRST DAY	SYNCRONIZING PRINCIPLE		METHODS OF SYNCRONIZING		SINGLE LINE DIAGRAM
SECOND DAY	PROSEDURE OF SYNCRONIZING (PRACTICAL)	BREAK	PROSEDURE OF SYNCRONIZING (PRACTICAL)	BREAK	PROSEDURE OF SYNCRONIZING (PRACTICAL)

**Subject to final changes*

**Speakers will be disclosed upon request*

6.0 PROGRAM DIRECTOR

	<p>Ir. Abd. Mokhti B. Salleh has a Master Degree in Lightning Protection System. He is currently a Chairman of Mega Jati Consult Sdn Bhd, the M&E Consultant. He has more than 30 years' experience in the field of Lightning and Surge Protection system. Ir Abd. Mokhti was appointed by JKR Electric Department, Malaysia as a Specialist Lightning and Surge Protection System for a period between May 2008 to April 2009. One of the scopes of works is to train the JKR Electric's engineers on the design of the Lightning and Surge Protection System. He has given many talks and seminar on Lightning and Surge Protection System. He was also appointed as Visiting Professor at Universiti Malaysia Perlis in 2015.</p>
	<p>Muhammad Arkam Bin Che Munaaim is a PEPC since 2005 and a MIEM in 2004. He a Certified Energy Manager Registered (REEM) with Suruhanjaya Tenaga Malaysia (ST) and a Certified Construction Project Manager (CCPM) of Construction Industry Development Board Malaysia (CIDB). He obtained his PhD in Energy Conservation from USM, Master of Science in Building Technology USM, where previously in year 2000 obtained his B. Eng. (Hons) in Electrical Engineering from UTM Skudai, Johor, Malaysia. His area of working includes renewable energy (solar, mini hydro), mechanical & electrical building services and project management.</p>

**program Director is responsible to prepare the Course Outline, syllabus and appointment of the Speaker/s, Program Director is not necessarily the Speaker for the Course.*

Mega Jati ACADEMY

(A Division of Mega Jati Consult Sdn Bhd)

An ISO 9001:2015 Certified Company

Mega Jati Consult is a Certified Training Provider for the Ministry of Finance (MOF), Human Resource Development Fund (HRDF) Malaysia and Construction Industry Development Board (CIDB) Malaysia. ALL Trainings by Mega Jati are HRDF Claimable

+6015 9600 0411	academy.mjc	@mjc_academy	Mega Jati ACADEMY	
