www.megajatiacademy.com PAGE 1 OF 5



### **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 Operation of High Voltage Electrical Equipment: POWER TRANSFORMER FUNDAMENTAL

TRAINING ID: MJA/ELEC/2020/008

### **MEGA JATI ACADEMY SDN BHD**

Jalan Marikh U5/174, CB Seksyen U5, 40150 Shah Alam, Selangor

2020

# Theory and Operation of High Voltage Electrical Equipment: POWER TRANSFORMER FUNDAMENTAL

TRAINING ID: MJA/ELEC/2020/008

#### 1.0 INTRODUCTION

Distribution transformers are normally considered to be those transformers which provide the transformation from 11 kV and lower voltages down to the level of the final distribution network. Now it is nominally 400 V three-phase and 230 V between phase and neutral. Of course, these are nominal voltages to be applied at consumers' terminals and there are tolerances to take account of light loading conditions and regulation at times of peak load. However, transformer voltage ratios have not changed, although it is possible that some adjustment of transformer off-circuit tappings might have been made at some points of the distribution network. Therefore, in making reference to distribution transformer low-voltage windings and systems, these will be termed 415 V or 0.415 kV. Except where specifically indicated to the contrary this should be taken as a nominal description of the winding or system voltage class and not necessarily the rated voltage of the winding or system in question. They range in size from about 15 kVA, 3.3/0.415 kV to 12.5 MVA, 11/3.3 kV and the average rating being around 800 kVA. The vast majority are free breathing oil- filled, but they may be hermetically sealed oil-filled, dry type, or occasionally, where there is a potential fire hazard, fire resistant fluids notably silicone fluid, synthetic ester or high molecular weight hydrocarbons which have a fire point in excess of 300° C may be specified by engineers.

(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 High Voltage Electrical Equipment: POWER TRANSFORMER that important for electrical engineering personnel. The participants will be exposed to the operational of high voltage distribution transformer according to the practices and applications. In addition, the basic design of high voltage distribution transformer will be elaborated and shared. It will combine both theory and practices in operating, handling, troubleshooting and maintenance of high voltage distribution transformer 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 place once the training is confirmed.

#### 4.0 COURSE FEE:

NO	METHOD OF PAYMENT	ACCOUNT NAME	BANK	ACCOUNT NUMBER	
	Cek /	Mega Jati	Bank Islam	1427-401000-7241	
1.	Online Transfer	ACADEMY	Malaysia		
		Sdn Bhd	Berhad		
2.	LO / HRDF	Mega Jati	Maybank Banking	5142-7132-6182	
		Consult Sdn Bhd	Berhad		
3.	e-Perolehan	Mega Jati	Nombor e-Pero	lehan Pembekal	
		Consult Sdn Bhd	eP-140	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	POWER TRANSFORMER FUNDAMENTAL			
DURATION REQUIRED	2 DAYS	LEARNING TIME	16 HOURS	
METHOD OF LEARNING	LECTURE, HT HANDS ON WORKSHOP, DESIGN CALCULATION, AUDIO VISUAL.			
CPD AWARDED	CIDB 20 CPD FOR EACH PARTICIPANT / HRDF CLAIMABLE			

TIME	8.30 AM – 10.30 AM	10.30 AM 11.00 AM	11.00 AM – 12.30 PM	12.30 PM 2.30 PM	2.30 PM 5.30 PM
DAY 1	TRANSFORMER PRINCIPLE	BREAK	COMPONENT OF POWER TRANSFORMER	BREAK	VECTOR GROUP OF TRANSFORMER
DAY 2	IR & DAR TEST		PI TEST		OIL TEST

\*Subject to final changes

\*Speakers will be disclosed upon request

#### **6.0 PROGRAM DIRECTOR**



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.



**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.

\*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 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	
Q	X		in	4