Project: ETAP Page: 1

Location: 19.0.1C Date: 11-03-2022

Contract:

Engineer: Study Case: A\_SC Revision: Base

Filename: Nine Bus System Config.: Normal

## **Arc Flash Analysis**

## Fault Current Decay Calculation Method

Arc Fault at Bus: Bus4

Solution Method: Fault Current Decay

Nominal kV = 230.000 Prefault Voltage = 100% of nominal bus kV System Grounding = Grounded

Base kV = 230.000 = 100% of base kV Working Distance = 48 inches

## **Bus Arc Flash Results**

Total Bolted	Total Arcing	I	Fault Clea	ring Time		
(kA)	(kA) (kA)		(cycles)	(Seconds)		(cal/cm <sup>2</sup> )
Ibf" = 1.549	Ia" = 1.549	FCT1 =	4.0	0.067	Incident Energy 1 =	8.185
Ibf' = 1.268	Ia' = $1.268$	FCT2 =	8.0	0.133	Incident Energy 2 =	13.399
Ibf $= 0.930$	Ia $= 0.930$					
		-	12.0	0.200	,	
	Fault	Clearing Time =	12.0	0.200	Total Incident Energy =	21.584

Energy Level\* Level D

Arc Flash Boundary = 17.00 ft

SN:

## **Individual Contribution**

_	Arc Faul	to Bus Arc Fault			Incident Energy							
		Phase		Bolted	Arcing	FCT	Arcing	FCT	Protective Device ID	Incident E	AFB	Energy
	ID	Type	Type	(kA)	(kA)	(cycles)	(kA)	(cycles)	for FCT	(cal/cm <sup>2</sup> )	(ft)	Level*