

 <p>DEENN Engineering Pte Ltd (A member of Lian Beng Group Ltd) 29 Harrison Road, Lian Beng Building Singapore 369648 Tel: 6283 1468 Fax: 6280 9360</p>		Ref No	DE/DB/AcEW/MK2/002
		Date	20/11/24
Project : D2019-00162		To: Resident Engineer/ RTO (M&E)	

REQUEST FOR INSPECTION OF M&E WORKS

We have checked and confirmed that the following works is completed and in order for your inspection

Type of Activity (Tick One Only)	Slab Casting Services in Wall	<input type="checkbox"/>	Service Risers Functional Test	<input checked="" type="checkbox"/>	Final Inspection Others
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Type of Services (Tick One Only)	Electrical / Tel / SCV Plumbing / Sanitary Swimming Pool	<input type="checkbox"/>	Gas Installation Fire Protection Lift Installation	<input checked="" type="checkbox"/>	ACMV Others
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LOCATION B1K-2 level-3

<u>Gridline</u>	<u>Level -03</u>	
<u>Drawing Ref:</u>	<u>Revision</u>	<u>No. of Attachment</u>

1st Inspection			Passed / Failed	
Date/ Time Submitted	19/11/24		Comments by RTO (M&E)	
Date/ Time Requested	20/11/24		OK	
Inspection Date	Time started			
	Time ended			

Name and signature of Contractors representative
J. Alex/J. Duf *W.S.C.*
W.S.C.

Name and signature of a Resident Technical Officer (M&E)
Moe Thanh Tan

2nd Inspection			Passed / Failed	
Date/ Time Submitted			Comments by RTO (M&E)	
Date/ Time Requested				
Inspection Date	Time started			
	Time ended			

Name and signature of Contractors representative

Name and signature of a Resident Technical Officer (M&E)

3rd Inspection			Passed / Failed	
Date/ Time Submitted			Comments by RTO (M&E)	
Date/ Time Requested				
Inspection Date	Time started			
	Time ended			

Name and signature of Contractors representative

Name and signature of a Resident Technical Officer (M&E)

AIR CONDITIONING SYSTEM & FRESH AIR FAN FUNCTIONAL TEST



INTAC SYSTEMS SOLUTION PTE LTD
怡通系统解决方案有限公司
501 Tanjong Katong Road #05-01/02/03/04/05 Singapore 098631
Tel: +65 6442 2119 | Fax: +65 6442 2119 | E-mail: info@intacsol.com
Company GST Reg No: 2066542119 | Website: www.intacsol.com

B1K2 level-3

03-13

Project No.: D2019-00162/ISS/ACMV-BLK 2-03
Project Site: DIEPPE BARRACK-BLK 2

Reference: _____
Test Date: 21/11/24

ACP/BLK2-L3-01	Observation	Result	Remarks
1. General			
a. Verify enclosure of system control panel • Proper labelling of system control panel	Yes / <u>No</u>		
b. Turn on incoming power supply and check working • Incoming power supply lights	Yes / <u>No</u>		
2. Manual Operation			
a. Select AOM selector switch to 'M' position and verify the following system operations: • Press 'Start' button, AC 'Run' indicator light 'On' • Press 'Stop' button, AC 'Stop' indicator light 'On'	Yes / <u>No</u> Yes / <u>No</u>		
3. Automatic Operation			
a. Select AOM selector switch 'A' position • AC Duty 'On'	Yes / <u>No</u>		
b. Simulating Timer • AC Changeover to Standby Unit 'On'	Yes / <u>No</u>		
c. Simulating AC Error / Trip Alarm • AC Changeover to Standby Unit 'On' • Strobe Light Activated	Yes / <u>No</u> Yes / <u>No</u>		
d. Simulating HighTemperature Alarm • AC Stanby Unit 'On' • Strobe Light Activated	Yes / <u>No</u> Yes / <u>No</u>		1 Duty 1 Standby
4. Interlocking Operation			
a. Simulating Lighting 'On' • Motorized Damper 'Open' • FAF 'On'	Yes / No <u>Na</u> Yes / <u>No</u>		CP/BLK2-L3-03
b. Simulating Fire Alarm Signal Activated • Motorized Damper 'Close' • FAF 'Off' • AC 'Off'	Yes / <u>No</u> Yes / <u>No</u> <u>Na</u> Yes / <u>No</u>		
c. Simulating Hydrogen Sensor Alarm Activated • AC 'Off' • Motorized Damper 'Open' • EAF 'On' • FAF 'On'	Yes / <u>No</u> Yes / <u>No</u> <u>Na</u> Yes / <u>No</u> Yes / <u>No</u>		

TESTED BY / DATE: 18/11/24

J. Alex / J. Duf
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE:

WITNESSED BY / DATE:

RTO

Moe Thauk Tun
20/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

AIR CONDITIONING SYSTEM & FRESH AIR FAN FUNCTIONAL TEST



INTAC SYSTEMS SOLUTION PTE LTD
T & C S Y S T E M S S O L U T I O N P T E L T D
86 Jalan Besar Avenue 3, Kaki Bukit 419105 (SGN 0916) 04-6925-1111 | Email: intacs@intacs.com
Tel: +65 6242 0178 | Fax: +65 6242 1112 | Company Reg No: 200502174H | Website: www.intacs.com

B1k 2 level-3

STP 03-12

Project No.: D2019-00162/ISS/ACMV-BLK 2-03
Project Site: DIEPPE BARRACK-BLK 2

Reference: _____
Test Date: 21/10/24

ACP/BLK2-L3-02	Observation	Result	Remarks
1. General			
a. Verify enclosure of system control panel <ul style="list-style-type: none"> Proper labelling of system control panel 	Yes / <input checked="" type="checkbox"/>		
b. Turn on incoming power supply and check working <ul style="list-style-type: none"> Incoming power supply lights 	Yes / <input checked="" type="checkbox"/>		
2. Manual Operation			
a. Select AOM selector switch to 'M' position and verify the following system operations: <ul style="list-style-type: none"> Press 'Start' button, AC 'Run' indicator light 'On' Press 'Stop' button, AC 'Stop' indicator light 'On' 	Yes / <input checked="" type="checkbox"/> Yes / <input checked="" type="checkbox"/>		
3. Automatic Operation			
a. Select AOM selector switch 'A' position <ul style="list-style-type: none"> AC Duty 'On' 	Yes / <input checked="" type="checkbox"/>		
b. Simulating Timer <ul style="list-style-type: none"> AC Changeover to Standby Unit 'On' 	Yes / <input checked="" type="checkbox"/>		
c. Simulating AC Error / Trip Alarm <ul style="list-style-type: none"> AC Changeover to Standby Unit 'On' Strobe Light Activated 	Yes / <input checked="" type="checkbox"/> Yes / <input checked="" type="checkbox"/>		
d. Simulating HighTemperature Alarm <ul style="list-style-type: none"> AC Stanby Unit 'On' Strobe Light Activated 	Yes / <input checked="" type="checkbox"/> Yes / <input checked="" type="checkbox"/>	1 Duty 1 Standby	
4. Interlocking Operation			
a. Simulating Lighting 'On' <ul style="list-style-type: none"> Motorized Damper 'Open' FAF 'On' 	Yes / No <input checked="" type="checkbox"/> Yes / <input checked="" type="checkbox"/>	CP/BLK2-L3-03	
b. Simulating Fire Alarm Signal Activated <ul style="list-style-type: none"> Motorized Damper 'Close' FAF 'Off' AC 'Off' 	Yes / No Yes / No <input checked="" type="checkbox"/> Yes / No		
c. Simulating Hydrogen Sensor Alarm Activated <ul style="list-style-type: none"> AC 'Off' Motorized Damper 'Open' EAF 'On' FAF 'On' 	Yes / No Yes / No <input checked="" type="checkbox"/> Yes / No Yes / No		

TESTED BY / DATE: 18/11/24

J. Alex / J. Ray
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE:

WITNESSED BY / DATE:

RTO

Moe
Moe Thauk Tun
20/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

AIR CONDITIONING SYSTEM & FRESH AIR FAN FUNCTIONAL TEST



INTAC SYSTEMS SOLUTION PTE LTD
怡達系統有限公司
86, Jalan Sukan Aeroville 3/5/1, 82490 Petaling Jaya, Selangor Darul Ehsan
Tele: +60 3 802 73111 | Fax: +60 3 802 11141 | Email: info@intacsolution.com.my
Company GST Reg No: 20545171H | Website: www.intacsolution.com

B1k2 level-3
#03-11

Project No.: D2019-00162/ISS/ACMV-BLK 2-03
Project Site: DIEPPE BARRACK-BLK 2

Reference: _____
Test Date: 21/11/24

ACP/BLK2-L3-03	Observation	Result	Remarks
1. General			
a. Verify enclosure of system control panel <ul style="list-style-type: none"> • Proper labelling of system control panel 	Yes / <u>No</u>		
b. Turn on incoming power supply and check working <ul style="list-style-type: none"> • Incoming power supply lights 	Yes / <u>No</u>		
2. Manual Operation			
a. Select AOM selector switch to 'M' position and verify the following system operations: <ul style="list-style-type: none"> • Press 'Start' button, AC 'Run' indicator light 'On' • Press 'Stop' button, AC 'Stop' indicator light 'On' 	Yes / <u>No</u> Yes / <u>No</u>		
3. Automatic Operation			
a. Select AOM selector switch 'A' position <ul style="list-style-type: none"> • AC Duty 'On' 	Yes / <u>No</u>		
b. Simulating Timer <ul style="list-style-type: none"> • AC Changeover to Standby Unit 'On' 	Yes / <u>No</u>		
c. Simulating AC Error / Trip Alarm <ul style="list-style-type: none"> • AC Changeover to Standby Unit 'On' • Strobe Light Activated 	Yes / <u>No</u> Yes / <u>No</u>		
d. Simulating HighTemperature Alarm <ul style="list-style-type: none"> • AC Stanby Unit 'On' • Strobe Light Activated 	Yes / <u>No</u> Yes / <u>No</u>	1 Duty 1 Standby	
4. Interlocking Operation			
a. Simulating Lighting 'On' <ul style="list-style-type: none"> • Motorized Damper 'Open' • FAF 'On' 	Yes / <u>No</u> <u>Na</u> Yes / <u>No</u>	CP/BLK2-L3-03	
b. Simulating Fire Alarm Signal Activated <ul style="list-style-type: none"> • Motorized Damper 'Close' • FAF 'Off' • AC 'Off' 	Yes / <u>No</u> Yes / <u>No</u> <u>Na</u> Yes / <u>No</u>		
c. Simulating Hydrogen Sensor Alarm Activated <ul style="list-style-type: none"> • AC 'Off' • Motorized Damper 'Open' • EAF 'On' • FAF 'On' 	Yes / <u>No</u> Yes / <u>No</u> <u>Na</u> Yes / <u>No</u> Yes / <u>No</u>		

TESTED BY / DATE: 18/11/24

J. Alex / J. Duy
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE:

WITNESSED BY / DATE:

RTO

Moe Thauk Tun
20/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

**AIR CONDITIONING SYSTEM
& FRESH AIR FAN FUNCTIONAL TEST**



INTAC SYSTEMS SOLUTION PTE LTD
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Company GST Reg No. 205520714 | Website: www.intacs.com

Blk 2 level-3

03-14

Project No.: D2019-00162/ISS/ACMV-BLK 2-03
Project Site: DIEPPE BARRACK-BLK 2

Reference: _____
Test Date: 21/11/24

ACP/BLK2-L3-04	Observation	Result	Remarks
1. General			
a. Verify enclosure of system control panel <ul style="list-style-type: none">• Proper labelling of system control panel	Yes / <u>No</u>		
b. Turn on incoming power supply and check working <ul style="list-style-type: none">• Incoming power supply lights	Yes / <u>No</u>		
2. Manual Operation			
a. Select AOM selector switch to 'M' position and verify the following system operations: <ul style="list-style-type: none">• Press 'Start' button, AC 'Run' indicator light 'On'• Press 'Stop' button, AC 'Stop' indicator light 'On'	Yes / <u>No</u> Yes / <u>No</u>		
3. Automatic Operation			
a. Select AOM selector switch 'A' position <ul style="list-style-type: none">• AC Duty 'On'	Yes / <u>No</u>		
b. Simulating Timer <ul style="list-style-type: none">• AC Changeover to Standby Unit 'On'	Yes / <u>No</u>		
c. Simulating AC Error / Trip Alarm <ul style="list-style-type: none">• AC Changeover to Standby Unit 'On'• Strobe Light Activated	Yes / <u>No</u> Yes / <u>No</u>		
d. Simulating HighTemperature Alarm <ul style="list-style-type: none">• AC Stanby Unit 'On'• Strobe Light Activated	Yes / <u>No</u> Yes / <u>No</u>		1 Duty 1 Standby
4. Interlocking Operation			
a. Simulating Lighting 'On' <ul style="list-style-type: none">• Motorized Damper 'Open'• FAF 'On'	Yes / <u>No</u> <u>Na</u> Yes / <u>No</u>		CP/BLK2-L3-03
b. Simulating Fire Alarm Signal Activated <ul style="list-style-type: none">• Motorized Damper 'Close'• FAF 'Off'• AC 'Off'	Yes / <u>No</u> Yes / <u>No</u> <u>Na</u> Yes / <u>No</u>		
c. Simulating Hydrogen Sensor Alarm Activated <ul style="list-style-type: none">• AC 'Off'• Motorized Damper 'Open'• EAF 'On'• FAF 'On'	Yes / <u>No</u> Yes / <u>No</u> <u>Na</u> Yes / <u>No</u> Yes / <u>No</u>		

TESTED BY / DATE: 18/11/24

J. Alex / J. Duf.
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE:

WITNESSED BY / DATE:

RTO

Moe Thauk Tun
20/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

AIR-CONDITIONING SYSTEM PERFORMANCE TEST



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office). 04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacs@intacs.com.sg
Company/GST Reg No: 200609771H | Website: www.intacs.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION		
1	General	ROOF		03-01 NSMB
	Identification No.	CU-2-9 (a)	CU-2-9 (b)	FCU-9-1
	Brand / Model	MITSUBISHI/ PUCY-P250YKD	MITSUBISHI/ PUCY-PUCY-P200YKD	MITSUBISHI/ PLFY-P63VEM-PA
	Serial No.	43P-00141	32P-00059	43M00264
				43M00260
2	Current Measurement			
	Running Ampere - L1	10.0	7.8	
	Running Ampere - L2	9.5	7.4	
	Running Ampere - L3	9.1	7.2	
3	Pressure Setting			
	Low Side (psi)	120		
	High Side (psi)	375		
4	Temperature Measurement			
	Thermostat Setting (°C)		24.0	24.0
	On-Coil Temperature (°C)		24.3	24.5
	Off-Coil Temperature (°C)		12.7	12.3
	Room Temperature:DB/WB(°C)		24.0 / 19.0	
	Relative Humidity (%)		62.2	
5	Noise Measurement			
	Equipment Off (dBA)	48.0		43.1
	Equipment On (dBA)	53.0		45.5

TESTED BY / DATE : 18/11/24

WITNESSED BY / DATE : *[Signature]*

ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

RTO

Moe Thank You
21/11/2024

WITNESSED BY / DATE :

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) /04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg
Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

LOCATION				
1 General	03-01 NSMB			03-01 OPS WO
Identification No.	FCU-9-3	FCU-9-4	PFCU-9-5	FCU-9-6
Brand / Model	MITSUBISHI/ PLFY-P63VEM-PA	MITSUBISHI/ PLFY-P63VEM-PA	MITSUBISHI/ PEFY-P125VMHS-E-F	MITSUBISHI/ PLFY-P32VFM-E
Serial No.	43M00254	43M00245	23W00974	2XM12790
2 Current Measurement				
Running Ampere - L1				
Running Ampere - L2				
Running Ampere - L3				
3 Pressure Setting				
Low Side (psi)				
High Side (psi)				
4 Temperature Measurement				
Thermostat Setting (°C)	24.0	24.0	24.0	24.0
On-Coil Temperature (°C)	24.2	24.6		24.5
Off-Coil Temperature (°C)	11.9	12.1	18.4	11.6
Room Temperature:DB/WB(°C)	24.0 / 19.0			24.0 / 19.5
Relative Humidity (%)	62.2			65.6
5 Noise Measurement				
Equipment Off (dBA)	43.1			42.7
Equipment On (dBA)	45.5			46.3

TESTED BY / DATE : 18/11/24

J. Alay / J. Adu

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : Moe

RTO

Moe Thank Ton
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



IN TAC S Y S T E M S S O L U T I O N P T E L T D
英特系統有限公司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) / 04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg
Company/GST Reg No: 20060927711 | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION		
1	General	03-02 MEETING ROOM		
	Identification No.	FCU-9-7		
	Brand / Model	MITSUBISHI/ PLFY-P63VEM-PA		
	Serial No.	44M00361		
2	Current Measurement			
	Running Ampere - L1			
	Running Ampere - L2			
	Running Ampere - L3			
3	Pressure Setting			
	Low Side (psi)			
	High Side (psi)			
4	Temperature Measurement			
	Thermostat Setting (°C)	24.0		
	On-Coil Temperature (°C)	24.4		
	Off-Coil Temperature (°C)	11.9		
	Room Temperature:DB/WB(°C)	24.0 / 19.5		
	Relative Humidity (%)	65.6		
5	Noise Measurement			
	Equipment Off (dBA)	42.1		
	Equipment On (dBA)	44.8		

TESTED BY / DATE : 18/11/24

J. Alex/J. Auy

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

Moe

RTO

Moe Thank Tun
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英 樂 系 統 私 人 有 限 公 司
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Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg
Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No.

D2019-00162/ISS/ACMV-BLK 2-03

Date:

Project Site:

DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb
27 °C Wet Bulb

Relative Humidity: 73.20%

LOCATION				
1 General	ROOF	03-01 NSMB		
Identification No.	CU-2-10	FCU-10-1	FCU-10-2	FCU-10-3
Brand / Model	MITSUBISHI/ PUCY-P350YSKD	MITSUBISHI/ PLFY-P63VEM-PA	MITSUBISHI/ PLFY-P63VEM-PA	MITSUBISHI/ PLFY-P63VEM-PA
Serial No.	41P-00010	43M00242	43M00228	43M00252
2 Current Measurement				
Running Ampere - L1	15.8			
Running Ampere - L2	14.8			
Running Ampere - L3	14.5			
3 Pressure Setting				
Low Side (psi)	130			
High Side (psi)	375			
4 Temperature Measurement				
Thermostat Setting (°C)		24.0	24.0	24.0
On-Coil Temperature (°C)		24.3	24.3	24.5
Off-Coil Temperature (°C)		12.7	12.7	12.3
Room Temperature:DB/WB(°C)		24.0 / 19.0		
Relative Humidity (%)		62.2		
5 Noise Measurement				
Equipment Off (dBA)	46.8	43.1		
Equipment On (dBA)	51.0	45.5		

TESTED BY / DATE : 18/11/24

J. Alex/ J. Ong

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

WITNESSED BY / DATE :

RTO

Joe Thank-Tun
21/11/2024

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) /04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg
Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION		
1 General		03-01 NSMB	03-01A HD OFFICE	03-02 MEETING ROOM
Identification No.		FCU-10-4	FCU-10-5	FCU-10-6
Brand / Model	MITSUBISHI/ PLFY-P63VEM-PA	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P63VEM-PA	
Serial No.	43M00197	2XM12772	43M00234	
2 Current Measurement				
Running Ampere - L1				
Running Ampere - L2				
Running Ampere - L3				
3 Pressure Setting				
Low Side (psi)				
High Side (psi)				
4 Temperature Measurement				
Thermostat Setting (°C)	24.0	24.0	24.0	
On-Coil Temperature (°C)	24.6	24.1	24.3	
Off-Coil Temperature (°C)	12.8	12.4	11.9	
Room Temperature:DB/WB(°C)	24.0 / 19.0	24.0 / 19.5	24.0 / 19.5	
Relative Humidity (%)	62.2	65.6	65.6	
5 Noise Measurement				
Equipment Off (dBA)	43.1	42.0	42.1	
Equipment On (dBA)	45.5	44.6	44.8	

TESTED BY / DATE : 18/11/24

J. Alex / J. Alex

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : moe

RTO

moe Thank Tim
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
Bld 1, Kaki Bukit Avenue 3, KB 1, #04-03 (Main Office) /04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg
Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

LOCATION					
1 General	ROOF	03-03A OFFICE ROOM	03-03C OFFICE ROOM	03-03D OFFICE ROOM	
Identification No.	CU-2-11	FCU-11-1	FCU-11-2	FCU-11-3	
Brand / Model	MITSUBISHI/ PUCY-P250YKD	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P50VEM-PA	
Serial No.	42P-00091	42M00142	42M00140	42M00140	
2 Current Measurement					
Running Ampere - L1	9.9				
Running Ampere - L2	9.2				
Running Ampere - L3	8.9				
3 Pressure Setting					
Low Side (psi)	130				
High Side (psi)	375				
4 Temperature Measurement					
Thermostat Setting (°C)		24.0	24.0	24.0	
On-Coil Temperature (°C)		24.1	24.8	24.6	
Off-Coil Temperature (°C)		11.9	12.7	12.8	
Room Temperature:DB/WB(°C)		24.0 / 19.0	24.0 / 19.5	24.0 / 19.0	
Relative Humidity (%)		62.2	65.6	62.2	
5 Noise Measurement					
Equipment Off (dBA)	46.0	42.0	42.0	42.0	
Equipment On (dBA)	53.0	45.5	44.9	45.8	

TESTED BY / DATE : 18/11/24
J. Alex/J. Day

ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : Ngoc
Moe Thanh Ton
21/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英 洲 系 統 私 人 有 限 公 司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) /04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: Intacss@intacss.com.sg
Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION		
1 General		03-08 CONFERENCE	03-09 WAITING ROOM	
Identification No.		FCU-11-4	FCU-11-5	
Brand / Model		MITSUBISHI/ PLFY-P80VEM-PA	MITSUBISHI/ PLFY-P50VEM-PA	
Serial No.		43M00208	42M00117	
2 Current Measurement				
Running Ampere - L1				
Running Ampere - L2				
Running Ampere - L3				
3 Pressure Setting				
Low Side (psi)				
High Side (psi)				
4 Temperature Measurement				
Thermostat Setting (°C)		24.0	24.0	
On-Coil Temperature (°C)		24.6	24.1	
Off-Coil Temperature (°C)		12.8	12.4	
Room Temperature:DB/WB(°C)		24.0 / 19.0	24.0 / 18.5	
Relative Humidity (%)		62.2	58.8	
5 Noise Measurement				
Equipment Off (dBA)		43.1	42.0	
Equipment On (dBA)		45.5	44.6	

TESTED BY / DATE : 18/11/24

J. Alex/J. Day

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

moe

RTO

moe Thank You
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
Buk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) /04/05/09, Singapore 416087
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Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

LOCATION				
1 General	ROOF	03-03 OFFICE	03-03 B DISCUSSION ROOM	03-03 OFFICE
Identification No.	CU-2-12	FCU-12-1	FCU-12-2	FCU-12-3
Brand / Model	MITSUBISHI/ PUCY-P350YKD	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P63VEM-PA	MITSUBISHI/ PLFY-P32VFM-E
Serial No.	42P-00024	42M00941	43M00198	42M00936
2 Current Measurement				
Running Ampere - L1	16.3			
Running Ampere - L2	15.4			
Running Ampere - L3	14.9			
3 Pressure Setting				
Low Side (psi)	120			
High Side (psi)	375			
4 Temperature Measurement				
Thermostat Setting (°C)		24.0	24.0	24.0
On-Coil Temperature (°C)		24.5	24.3	24.4
Off-Coil Temperature (°C)		12.4	12.2	12.6
Room Temperature:DB/WB(°C)		24.0 / 19.0	24.0 / 19.0	24.0 / 19.0
Relative Humidity (%)		62.2	62.2	62.2
5 Noise Measurement				
Equipment Off (dBA)	47.2	42.0	42.0	42.0
Equipment On (dBA)	53.7	45.8	45.9	45.0

TESTED BY / DATE : 18/11/24
J. Alex G-S-Art.

ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : Ng Hoe Thak Tan
RTO
21/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

LOCATION				
1 General	03-08 CONFERENCE	03-09 WAITING ROOM	03-03 OFFICE	
Identification No.	FCU-12-4	FCU-12-5	PFCU-12-6	
Brand / Model	MITSUBISHI/ PLFY-P80VEM-PA	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PEFY-P125VMHS-E-F	
Serial No.	43M00207	42M00143	34W01000	
2 Current Measurement				
Running Ampere - L1				
Running Ampere - L2				
Running Ampere - L3				
3 Pressure Setting				
Low Side (psi)				
High Side (psi)				
4 Temperature Measurement				
Thermostat Setting (°C)	24.0	24.0	24.0	
On-Coil Temperature (°C)	24.6	24.1		
Off-Coil Temperature (°C)	12.4	12.2	18.2	
Room Temperature:DB/WB(°C)	24.0 / 19.0	24.0 / 18.5		
Relative Humidity (%)	62.2	58.8		
5 Noise Measurement				
Equipment Off (dBA)	43.1	42.0		
Equipment On (dBA)	45.5	45.8		

TESTED BY / DATE : 18/11/24
 J. Alex / J. Day

ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : Nguyen

RTO
Moet Thank Tuan
24/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION		
1 General		ROOF	03-04 DTD Branch	03-04 Hd DTD
Identification No.	CU-2-13 (a)	CU-2-13 (b)	FCU-13-1	FCU-13-2
Brand / Model	MITSUBISHI/ PUCY-P300YKD	MITSUBISHI/ PUCY-P250YKD	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P32VEM-PA
Serial No.	26P-000271	42P-00089	36M00659	42M00928
2 Current Measurement				
Running Ampere - L1	13.2	10.0		
Running Ampere - L2	12.5	9.5		
Running Ampere - L3	12.0	9.1		
3 Pressure Setting				
Low Side (psi)	125			
High Side (psi)	375			
4 Temperature Measurement				
Thermostat Setting (°C)			24.0	24.0
On-Coil Temperature (°C)			24.5	24.1
Off-Coil Temperature (°C)			11.9	11.5
Room Temperature:DB/WB(°C)			24.0 / 19.0	24.0 / 19.0
Relative Humidity (%)			62.2	62.2
5 Noise Measurement				
Equipment Off (dBA)	46.9		42.8	41.8
Equipment On (dBA)	52.9		44.9	44.3

TESTED BY / DATE : 18/11/24

J. Alex/J. Day

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : mjt

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Moe Thank Tim
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
 27 °C Wet Bulb

LOCATION				
1 General	03-05 PLAN Branch	03-06 OOTW	CORRIDOR	03-06A DISCUSSION ROOM
Identification No.	FCU-13-3	FCU-13-4	PFCU-13-5	FCU-13-6
Brand / Model	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PEFY-P200VMHS-E-F	MITSUBISHI/ PLFY-P50VEM-PA
Serial No.	42M00937	42M00104	3YW01265	43M00198
2 Current Measurement				
Running Ampere - L1				
Running Ampere - L2				
Running Ampere - L3				
3 Pressure Setting				
Low Side (psi)				
High Side (psi)				
4 Temperature Measurement				
Thermostat Setting (°C)	24.0	24.0	24.0	24.0
On-Coil Temperature (°C)	24.6	24.1		24.1
Off-Coil Temperature (°C)	12.4	12.2	18.0	12.2
Room Temperature:DB/WB(°C)	24.0 / 19.5	24.0 / 19.0		24.0 / 19.0
Relative Humidity (%)	65.6	62.2		62.2
5 Noise Measurement				
Equipment Off (dBA)	43.1	42.0	43.0	42.0
Equipment On (dBA)	45.5	45.8	44.9	45.8

TESTED BY / DATE : 18/11/24
J. Alex/J. Dyt

ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : Moe

RTO
Moe Thank You
21/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

LOCATION			
1 General	03-06 HD CO/I	03-07 ANCILLARY OFFICE	
Identification No.	FCU-13-7	FCU-13-8	
Brand / Model	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P100VEM-PA	
Serial No.	42M00919	42M00078	
2 Current Measurement			
Running Ampere - L1			
Running Ampere - L2			
Running Ampere - L3			
3 Pressure Setting			
Low Side (psi)			
High Side (psi)			
4 Temperature Measurement			
Thermostat Setting (°C)	24.0	24.0	
On-Coil Temperature (°C)	24.2	24.5	
Off-Coil Temperature (°C)	12.6	11.8	
Room Temperature:DB/WB(°C)	24.0 / 19.0	24.0 / 19.0	
Relative Humidity (%)	62.2	62.2	
5 Noise Measurement			
Equipment Off (dBA)	42.0	41.8	
Equipment On (dBA)	44.8	44.7	

TESTED BY / DATE : 18/11/24

J. Alex / J. Day

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

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WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No.

D2019-00162/ISS/ACMV-BLK 2-03

Date:

Project Site:

DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb
27 °C Wet Bulb

Relative Humidity: 73.20%

LOCATION					
1 General	ROOF	03-11 DTD Branch	03-05 Plans Branch	03-05 Plans Branch	
Identification No.	CU-2-14	FCU-14-1	FCU-14-2	FCU-14-3	
Brand / Model	MITSUBISHI/ PUCY-P350YKD	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-32VFM-E	
Serial No.	3XP-00470	42M00926	42M00148	42M00925	
2 Current Measurement					
Running Ampere - L1	15.2				
Running Ampere - L2	13.9				
Running Ampere - L3	13.8				
3 Pressure Setting					
Low Side (psi)	130				
High Side (psi)	375				
4 Temperature Measurement					
Thermostat Setting (°C)		24.0	24.0	24.0	
On-Coil Temperature (°C)		24.5	24.5	24.1	
Off-Coil Temperature (°C)		11.9	11.9	11.5	
Room Temperature:DB/WB(°C)		24.0 / 19.0	24.0 / 19.5	24.0 / 19.5	
Relative Humidity (%)		62.2	65.6	65.6	
5 Noise Measurement					
Equipment Off (dBA)	46.9	42.8	42.8	41.8	
Equipment On (dBA)	52.9	44.9	44.9	44.3	

TESTED BY / DATE : 18/11/24

J. Alex/ S. Tay

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

RTO

moe
moe Thank-Tun
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

LOCATION				
1 General	03-05 Hd Plans	03-06 DY HD OOTW	03-06 HD OOTW	03-07 ANCILLARY OFFICE
Identification No.	FCU-14-4	FCU-14-5	FCU-14-6	FCU-14-7
Brand / Model	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P32VFM-E
Serial No.	43M00205	42M00068	42M00921	42M00920
2 Current Measurement				
Running Ampere - L1				
Running Ampere - L2				
Running Ampere - L3				
3 Pressure Setting				
Low Side (psi)				
High Side (psi)				
4 Temperature Measurement				
Thermostat Setting (°C)	24.0	24.0	24.0	24.0
On-Coil Temperature (°C)	24.6	24.1	24.1	24.1
Off-Coil Temperature (°C)	12.4	12.2	12.2	12.2
Room Temperature:DB/WB(°C)	24.0 / 19.0	24.0 / 19.0	24.0 / 19.0	24.0 / 19.5
Relative Humidity (%)	62.2	62.2	62.2	65.6
5 Noise Measurement				
Equipment Off (dBA)	43.1	42.0	43.0	42.0
Equipment On (dBA)	45.5	45.8	44.9	45.8

TESTED BY / DATE : 18/11/24

J. Alex/J. ADY

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

RTO

WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb
27 °C Wet Bulb Relative Humidity: 73.20%

		LOCATION		
1	General	03-07 ANCILLARY OFFICE		
	Identification No.	FCU-14-8		
	Brand / Model	MITSUBISHI/ PLFY-P100VEM-PA		
	Serial No.	42M00080		
2	Current Measurement			
	Running Ampere - L1			
	Running Ampere - L2			
	Running Ampere - L3			
3	Pressure Setting			
	Low Side (psi)			
	High Side (psi)			
4	Temperature Measurement			
	Thermostat Setting (°C)	24.0		
	On-Coil Temperature (°C)	24.6		
	Off-Coil Temperature (°C)	12.4		
	Room Temperature:DB/WB(°C)	24.0 / 19.0		
	Relative Humidity (%)	62.2		
5	Noise Measurement			
	Equipment Off (dBA)	43.1		
	Equipment On (dBA)	45.5		

TESTED BY / DATE : 18/11/24

J Alex/J ADY

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

WITNESSED BY / DATE :

RTO

Moe Thauk Tun
21/11/2024

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) /04/05/09, Singapore 416087
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Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION				
1	General	ROOF	03-15 ANCILLARY OFFICE			
	Identification No.	CU-2-15	FCU-15-1	FCU-15-2	PFCU-15-3	
	Brand / Model	MITSUBISHI/ PUCY-P350YKD	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PEFY-P125VMHS-E-F	
	Serial No.	42P-00032	42M00169	42M00927	34W00999	
2	Current Measurement					
	Running Ampere - L1	15.4				
	Running Ampere - L2	15.1				
	Running Ampere - L3	14.7				
3	Pressure Setting					
	Low Side (psi)	130				
	High Side (psi)	365				
4	Temperature Measurement					
	Thermostat Setting (°C)		24.0	24.0	24.0	
	On-Coil Temperature (°C)		24.5	24.5	24.1	
	Off-Coil Temperature (°C)		11.9	11.9	11.5	
	Room Temperature:DB/WB(°C)		24.0 / 19.0			
	Relative Humidity (%)		62.2			
5	Noise Measurement					
	Equipment Off (dBA)	46.9	42.8			
	Equipment On (dBA)	52.9	44.9			

TESTED BY / DATE : 18/11/24

s-Alex/ J-day

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

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21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION			
1	General	03-16 DISCUSSION CORNER	03-16 DY HD MP	03-16 DIV PSYCH	03-16B INTERVIEW
	Identification No.	FCU-15-4	FCU-15-5	FCU-15-6	FCU-15-7
	Brand / Model	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P32VFM-E
	Serial No.	42M00150	42M00916	42M00939	42M00940
2	Current Measurement				
	Running Ampere - L1				
	Running Ampere - L2				
	Running Ampere - L3				
3	Pressure Setting				
	Low Side (psi)				
	High Side (psi)				
4	Temperature Measurement				
	Thermostat Setting (°C)	24.0	24.0	24.0	24.0
	On-Coil Temperature (°C)	24.5	24.5	24.5	24.1
	Off-Coil Temperature (°C)	11.9	11.9	11.9	11.5
	Room Temperature:DB/WB(°C)	24.0 / 19.0	24.0 / 19.0	24.0 / 19.0	24.0 / 19.0
	Relative Humidity (%)	62.2	62.2	62.2	62.2
5	Noise Measurement				
	Equipment Off (dBA)	42.8	42.8	42.8	41.8
	Equipment On (dBA)	44.9	44.9	44.9	44.3

TESTED BY / DATE : 18/11/24

J. Alex / J. Ong

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

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moe Thank You
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
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Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

LOCATION				
1 General	ROOF	03-15 ANCILLARY OFFICE	03-16A OFFICE	03-16 MANPOWER BRANCH
Identification No.	CU-2-16	FCU-16-1	FCU-16-2	FCU-16-3
Brand / Model	MITSUBISHI/ PUCY-P200YKD	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P32VFM-E	MITSUBISHI/ PLFY-P50VEM-PA
Serial No.	32P-00063	42M00144	42M00933	42M00171
2 Current Measurement				
Running Ampere - L1	7.6			
Running Ampere - L2	7.4			
Running Ampere - L3	6.8			
3 Pressure Setting				
Low Side (psi)	120			
High Side (psi)	375			
4 Temperature Measurement				
Thermostat Setting (°C)		24.0	24.0	24.0
On-Coil Temperature (°C)		24.5	24.5	24.1
Off-Coil Temperature (°C)		11.9	11.9	11.5
Room Temperature:DB/WB(°C)		24.0 / 19.0		24.0 / 19.0
Relative Humidity (%)		62.2		62.2
5 Noise Measurement				
Equipment Off (dBA)	46.9	42.8		41.8
Equipment On (dBA)	52.9	44.9		44.3

TESTED BY / DATE : 18/11/24

J. Alex/J. Amy

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

Moey

RTO

Moey Thank You

21/11/2029

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

PERFORMANCE TEST



Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) /04/05/09, Singapore 416087

Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg

Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No.

D2019-00162/ISS/ACMV-BLK 2-03

Date:

Project Site:

DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb
27 °C Wet Bulb Relative Humidity: 73.20%

LOCATION			
1 General	03-16 MANPOWER BRANCH	03-16 HD MP	
Identification No.	FCU-16-4	FCU-16-5	
Brand / Model	MITSUBISHI/ PLFY-P50VEM-PA	MITSUBISHI/ PLFY-P50VEM-PA	
Serial No.	42M00038	42M00131	
2 Current Measurement			
Running Ampere - L1			
Running Ampere - L2			
Running Ampere - L3			
3 Pressure Setting			
Low Side (psi)			
High Side (psi)			
4 Temperature Measurement			
Thermostat Setting (°C)	24.0	24.0	
On-Coil Temperature (°C)	24.5	24.5	
Off-Coil Temperature (°C)	11.9	11.9	
Room Temperature:DB/WB(°C)	24.0 / 19.0	24.0 / 19.0	
Relative Humidity (%)	62.2	62.2	
5 Noise Measurement			
Equipment Off (dBA)	42.8	42.8	
Equipment On (dBA)	44.9	44.9	

TESTED BY / DATE : 18/11/24

J. Alex/J. S. Jay

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

RTO

Moe Thauk Tun
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英 樂 系 統 機 人 有 限 公 司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) /04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg
Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION		
1 General		ROOF	03-13 NCR	03-12 NCR
Identification No.	CU-2-17A (DUTY)	FCU-17A-1 (DUTY)	FCU-17A-2 (DUTY)	FCU-17A-3 (DUTY)
Brand / Model	MITSUBISHI/ PUCY-P350YKD	MITSUBISHI/ PKFY-P100V рKM-E	MITSUBISHI/ PKFY-P100V рKM-E	MITSUBISHI/ PKFY-P100V рKM-E
Serial No.	3XP-00452	35M20580	35M20598	35M20597
2 Current Measurement				
Running Ampere - L1	16.3			
Running Ampere - L2	15.4			
Running Ampere - L3	14.9			
3 Pressure Setting				
Low Side (psi)	125			
High Side (psi)	375			
4 Temperature Measurement				
Thermostat Setting (°C)		22.0	22.0	22.0
On-Coil Temperature (°C)		22.5	22.7	22.7
Off-Coil Temperature (°C)		12.4	12.7	12.7
Room Temperature:DB/WB(°C)		22.0 / 17.5	22.0 / 17.5	22.0 / 17.5
Relative Humidity (%)		64.0	64.0	64.0
5 Noise Measurement				
Equipment Off (dBA)	46.9	41.8	41.8	41.8
Equipment On (dBA)	52.9	44.3	44.3	44.3

TESTED BY / DATE: 18/11/24
Alexis J. S. Ong

ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : Moe Thank Tan
21/11/2024
RTO

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統有限公司
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Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____

Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
 27 °C Wet Bulb

		LOCATION			
1 General	03-14 NCR				
Identification No.	FCU-17A-4 (DUTY)				
Brand / Model	MITSUBISHI/ PKFY-P100VKM-E				
Serial No.	35M20587				
2 Current Measurement					
Running Ampere - L1					
Running Ampere - L2					
Running Ampere - L3					
3 Pressure Setting					
Low Side (psi)					
High Side (psi)					
4 Temperature Measurement					
Thermostat Setting (°C)	22.0				
On-Coil Temperature (°C)	22.7				
Off-Coil Temperature (°C)	12.7				
Room Temperature:DB/WB(°C)	22.0 / 17.5				
Relative Humidity (%)	64.0				
5 Noise Measurement					
Equipment Off (dBA)	41.8				
Equipment On (dBA)	44.3				

TESTED BY / DATE : 18/11/24

J. Alzey

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

RTO

Joe Thanh Tun
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特采系統有限公司
Blk 1, Kaki Bukit Avenue 3, KB-1, #04-03 (Main Office) / 04/05/09, Singapore 416087
Tel: +65 6842 7318 | Fax: +65 6842 7319 | E-mail: intacss@intacss.com.sg
Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION			
1	General	ROOF	03-13 NCR	03-12 NCR	03-11 NCR
	Identification No.	CU-2-17B (STANDBY)	FCU-17B-1 (STANDBY)	FCU-17B-2 (STANDBY)	FCU-17B-3 (STANDBY)
	Brand / Model	MITSUBISHI/ PUCY-P350YKD	MITSUBISHI/ PKFY-P100VKM-E	MITSUBISHI/ PKFY-P100VKM-E	MITSUBISHI/ PKFY-P100VKM-E
	Serial No.	41P-00017	35M20575	35M20596	35M20622
2	Current Measurement				
	Running Ampere - L1	15.8			
	Running Ampere - L2	15.1			
	Running Ampere - L3	14.9			
3	Pressure Setting				
	Low Side (psi)	120			
	High Side (psi)	375			
4	Temperature Measurement				
	Thermostat Setting (°C)		22.0	22.0	22.0
	On-Coil Temperature (°C)		22.5	22.7	22.7
	Off-Coil Temperature (°C)		12.4	12.7	12.7
	Room Temperature:DB/WB(°C)		22.0 / 17.5	22.0 / 17.5	22.0 / 17.5
	Relative Humidity (%)		64.0	64.0	64.0
5	Noise Measurement				
	Equipment Off (dBA)	46.9	41.8	41.8	41.8
	Equipment On (dBA)	52.9	44.3	44.3	44.3

TESTED BY / DATE : 18/11/24

J. Alex / J. Day

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

RTO

Nguyen
Nor Thanh Linh
21/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

**AIR-CONDITIONING SYSTEM
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
英特系統私人有限公司
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Company/GST Reg No: 200609771H | Website: www.intacss.com

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Date: _____
Project Site: DIEPPE BARRACK-BLOCK 2

Ambient Air Conditions: 31 °C Dry Bulb Relative Humidity: 73.20%
27 °C Wet Bulb

		LOCATION		
1 General		03-14 NCR		
Identification No.		FCU-17B-4 (STANDBY)		
Brand / Model		MITSUBISHI/ PKFY-P100VKM-E		
Serial No.		35M20581		
2 Current Measurement				
Running Ampere - L1				
Running Ampere - L2				
Running Ampere - L3				
3 Pressure Setting				
Low Side (psi)				
High Side (psi)				
4 Temperature Measurement				
Thermostat Setting (°C)		22.0		
On-Coil Temperature (°C)		22.7		
Off-Coil Temperature (°C)		12.7		
Room Temperature:DB/WB(°C)		22.0 / 17.5		
Relative Humidity (%)		64.0		
5 Noise Measurement				
Equipment Off (dBA)		41.8		
Equipment On (dBA)		44.3		

TESTED BY / DATE : 18/11/24

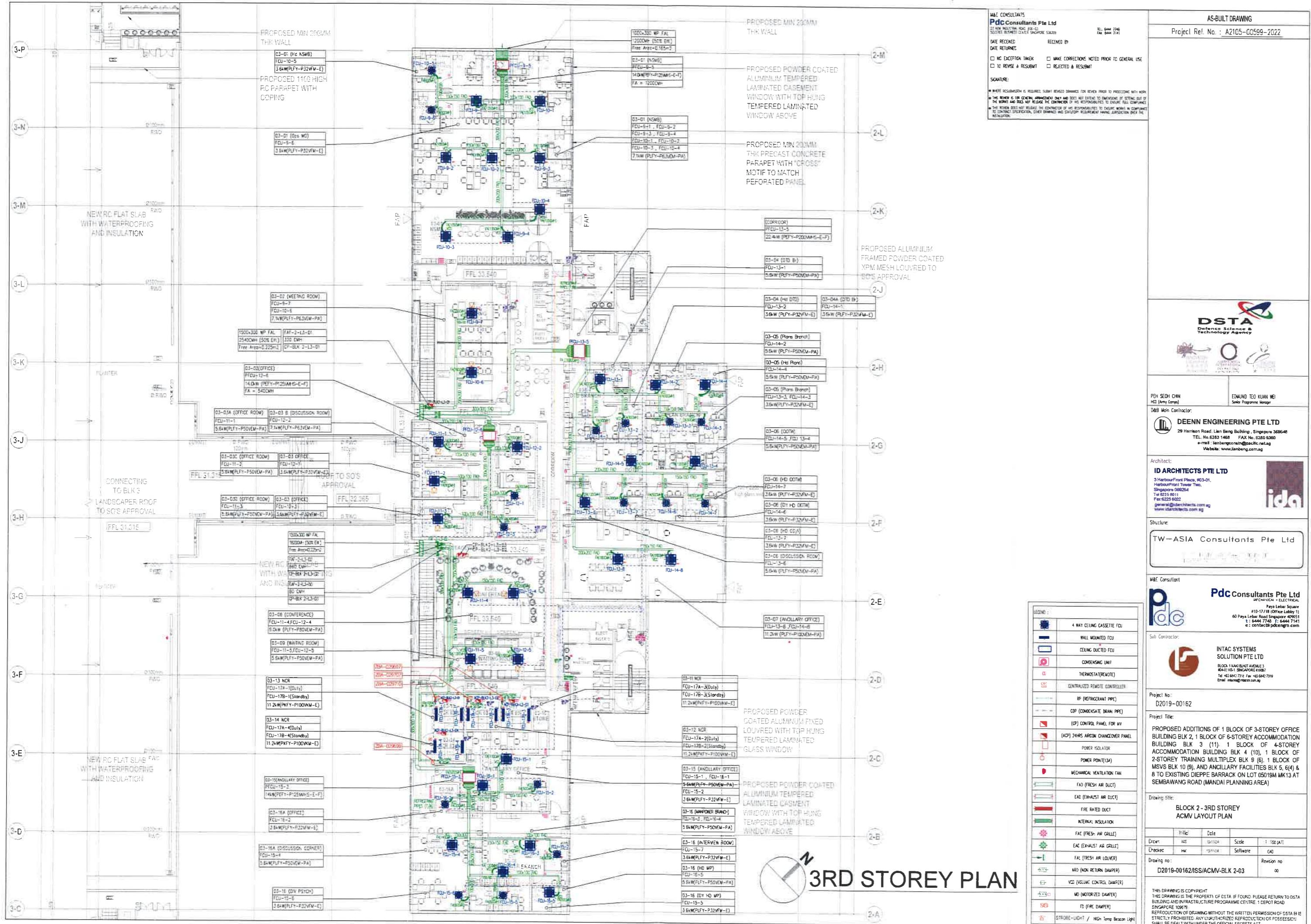
J. Alvaro / J. Duy
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE : Moe Thank Lin

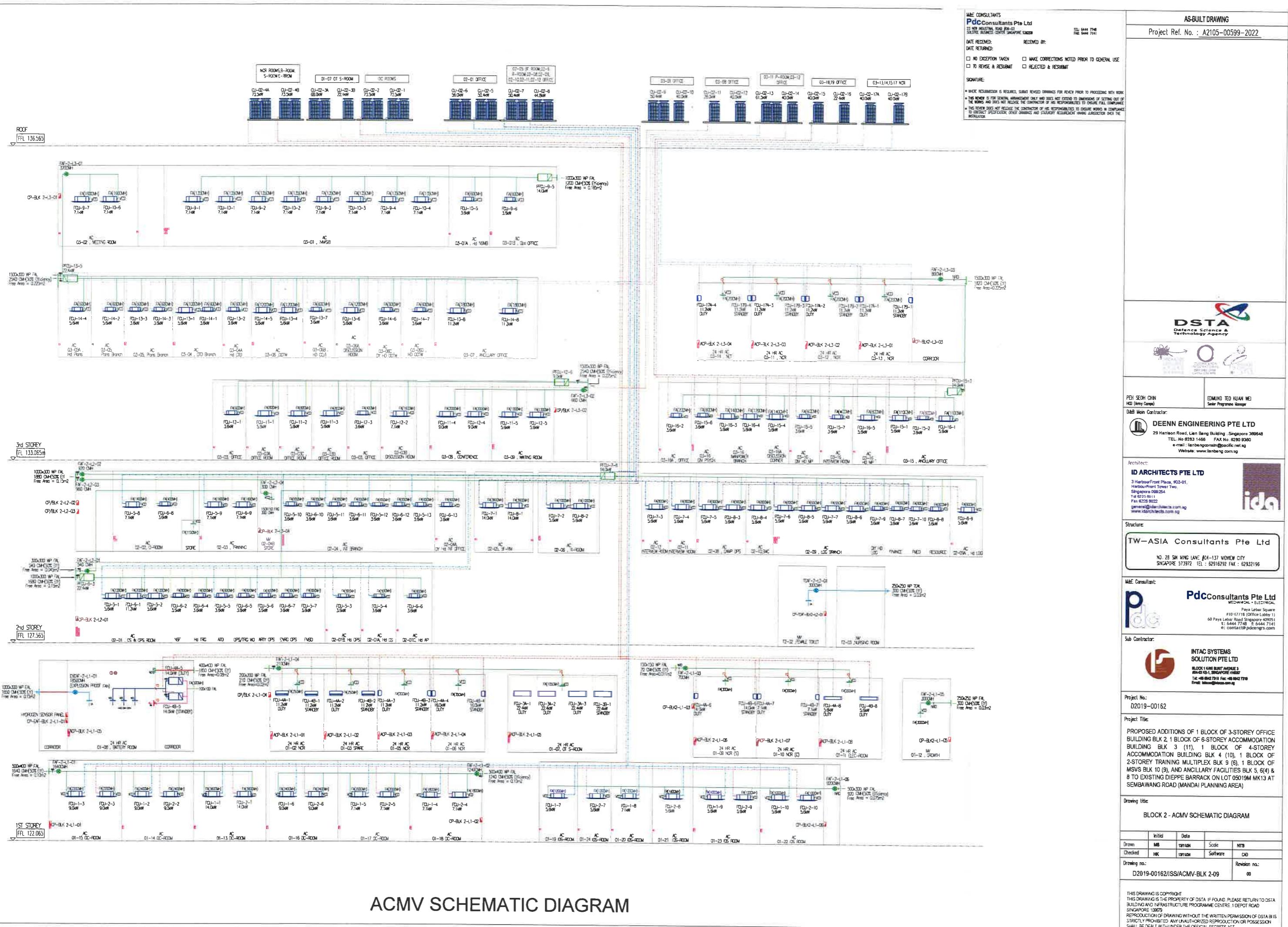
RTO
21/11/2024

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DEENN ENGINEERING PTE. LTD.



Air Conditioning Equipment Schedule - Level 3

Designation	Area Served	Brand / Model Offered	Type	Designed Capacity (kW)	Offered Capacity (kW)	Qty	No of Set	Power Input (kW)	Running Current (Amp)	Maximum Circuit (Amp)	Isolator Size (A/Ph)	Qty	Pipe Size Liquid	Pipe Size Gas	Airflow Rate (CMH)	Dimension (HxWxD)	Control Panel Designation	Control Panel Power Requirement	
CU-2-9	ROOF	MITSUBISHI	PUTY-P1450VSKD PUTY-P250VND PUTY-P200VND	VRF - 410A	43.4	50.4	1												
								5.95	9.50	14.25	32A(34)	1	# 9.52	# 22.22	10500	1650 x 920 x 740			
								4.66	7.40	11.10	20A(36)	1	# 9.52	# 22.22	10500	1650 x 920 x 740			
FCU-9-1	03-01 NSMB	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	6.32	7.1	1		0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840		
FCU-9-2								0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840			
FCU-9-3								0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840			
FCU-9-4	03-01 NSMB	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	6.32	7.1	1		0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840		
FCU-9-5								0.22	1.43	2.15	13A(16)	1	# 9.52	# 15.88	1200	380 x 1190 x 900			
FCU-9-6								0.02	0.23	0.35	13A(16)	1	# 6.35	# 12.70	570	208 x 570 x 570			
FCU-9-7	03-02 MEETING ROOM	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	7.02	7.1	1		0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840		
CU-2-10	ROOF	MITSUBISHI	PUTY-P350VSKD	VRF - 410A	35.77	40.0	1		9.66	15.40	25.10	32A(34)	1	# 12.70	# 28.58	12600	1650 x 1220 x 740		
FCU-10-1	03-01 NSMB	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	6.32	7.1	1		0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840		
FCU-10-2								0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840			
FCU-10-3								0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840			
FCU-10-4	03-01 HQ OFFICER	MITSUBISHI	PUTY-P12VFM-E	4-WAY CEILING CASSETTE	3.49	3.6	1		0.02	0.23	0.35	13A(16)	1	# 6.35	# 12.70	570	208 x 570 x 570		
FCU-10-5								0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840			
FCU-10-6																			
CU-2-11	ROOF	MITSUBISHI	PUTY-P250VND	VRF - 410A	27.93	28.0	1		5.95	9.50	14.25	32A(34)	1	# 9.52	# 22.22	10500	1650 x 920 x 740		
FCU-11-1	03-03 OFFICE ROOM	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	4.72	5.6	1		0.03	0.32	0.48	13A(16)	1	# 6.35	# 12.70	1140	258 x 840 x 840		
FCU-11-2	03-03 OFFICE ROOM	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	4.61	5.6	1		0.03	0.32	0.48	13A(16)	1	# 6.35	# 12.70	1140	258 x 840 x 840		
FCU-11-3	03-03 OFFICE ROOM	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	5.45	5.6	1		0.03	0.32	0.48	13A(16)	1	# 6.35	# 12.70	1140	258 x 840 x 840		
FCU-11-4	03-08 CONFERENCE	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	8.05	9.0	1		0.05	0.50	0.75	13A(16)	1	# 9.52	# 15.88	1380	258 x 840 x 840		
FCU-11-5	03-09 WAITING ROOM	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	4.90	5.6	1		0.03	0.32	0.48	13A(16)	1	# 6.35	# 12.70	1140	258 x 840 x 840		
CU-2-12	ROOF	MITSUBISHI	PUTY-P157VND	VRF - 410A	35.77	40.0	1		9.66	15.40	23.10	32A(34)	1	# 12.70	# 28.58	12600	1650 x 1220 x 740		
FCU-12-1	03-03 OFFICE	MITSUBISHI	PUTY-P12VFM-E	4-WAY CEILING CASSETTE	3.01	3.6	1		0.02	0.23	0.35	13A(16)	1	# 6.35	# 12.70	570	208 x 570 x 570		
FCU-12-2	03-03 DISCUSSION ROOM	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	6.15	7.1	1		0.03	0.36	0.54	13A(16)	1	# 9.52	# 15.88	1140	258 x 840 x 840		
FCU-12-3	03-03 OFFICE	MITSUBISHI	PUTY-P12VFM-E	4-WAY CEILING CASSETTE	2.11	3.6	1		0.02	0.23	0.35	13A(16)	1	# 6.35	# 12.70	570	208 x 570 x 570		
FCU-12-4	03-08 CONFERENCE	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	8.05	9.0	1		0.05	0.50	0.75	13A(16)	1	# 9.52	# 15.88	1380	258 x 840 x 840		
FCU-12-5	03-09 WAITING ROOM	MITSUBISHI	PUTY-P500VND	4-WAY CEILING CASSETTE	4.90	5.6	1		0.03	0.32	0.48	13A(16)	1	# 6.35	# 12.70	1140	258 x 840 x 840		
FCU-12-6	03-03 OFFICE	MITSUBISHI	PUTY-P125VH5-E-F	FRESH AIR INTAKE	3.47	14.0	1		0.16	0.67	1.01	13A(16)	1	# 9.52	# 15.88	1200	380 x 1000 x 900		
CU-2-13	ROOF	MITSUBISHI	PUTY-P550VSKD	VRF - 410A	44.80	61.5	1												
FCU-13-1	03-04 DTD Branch	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	5.38	5.6	1		7.82	12.5	18.75	32A(34)	1	# 12.70	# 22.20	10500	1650 x 920 x 740		
FCU-13-2	03-04 HQ DTD	MITSUBISHI	PUTY-P12VFM-E	4-WAY CEILING CASSETTE	2.93	3.6	1		5.95	9.50	14.25	32A(34)	1	# 9.52	# 22.22	10500	1650 x 920 x 740		
FCU-13-3	03-05 PLAN Branch	MITSUBISHI	PUTY-P12VFM-E	4-WAY CEILING CASSETTE	2.93	3.6	1		0.03	0.32	0.48	13A(16)	1	# 6.35	# 12.70	1140	258 x 840 x 840		
FCU-13-4	03-06 CDTW	MITSUBISHI	PUTY-P500VND	4-WAY CEILING CASSETTE	3.23	3.6	1		0.02	0.23	0.35	13A(16)	1	# 6.35	# 12.70	570	208 x 570 x 570		
FCU-13-5	CORRIDOR	MITSUBISHI	PUTY-P200VH5-E-F	FRESH AIR INTAKE	8.38	22.4	1		0.26	1.66	2.15	13A(16)	1	# 9.52	# 19.05	1680	470 x 1250 x 1120		
FCU-13-6	03-08 DISCUSSION ROOM	MITSUBISHI	PUTY-P500VND	4-WAY CEILING CASSETTE	4.57	5.6	1		0.03	0.32	0.48	13A(16)	1	# 6.35	# 12.70	1140	258 x 840 x 840		
FCU-13-7	03-08 HQ DCDI	MITSUBISHI	PUTY-PSKVM-PA	4-WAY CEILING CASSETTE	2.63	3.6	1		0.03	0.32</td									





CALIBRATION CERTIFICATE

CERTIFICATE NUMBER : CTP 1617M-24
ISSUE DATE : 20-Sep-24

JOB NUMBER : CCJR 24-7207
PAGE : 2 of 2

MEAN REFERENCE READING (m/s)	MEAN INSTRUMENT READING (m/s)		CORRECTION (m/s)
	Before adjustment	After adjustment	
2.50	2.5	—	0.00
5.00	4.9	—	0.10
10.00	9.9	—	0.10

A handwritten signature in blue ink, appearing to read 'Pr'.



CALTEK PTE. LTD.

23 Tagore Lane, #04-08/09/10/11 Tagore 23 Warehouse, Singapore 787601
Tel: (65) 64520300 Fax: (65) 64520500
Email: info@caltekgroup.com Website: www.caltekgroup.com

CALIBRATION CERTIFICATE

CERTIFICATE NUMBER	: CTP 1836-24	JR NO	: JR-11536
INSTRUMENT CODE	: 100024-10180	PAGE NUMBER	: 1 of 2

Instrument	: SOUND METER	Ambient Temperature	: (23±5)°C
Manufacturer	: UNI-T	Relative Humidity	: (55±10)%r.h.
Model No	: UT353	Received Date	: 18-Apr-24
Part No	: -	Date of Calibration	: 22-Apr-24
Serial No	: C203058495	Recommended Due Date	: 22-Apr-25
Range	: -	Issue Date	: 22-Apr-24
Asset/Tag/Id/Code	: -	Job Number	: CCJR24-3432
Customer	: INTAC SYSTEMS SOLUTION PTE LTD, Blk 1, Kaki Bukit Avenue 3, #04-03 KB-1, Singapore, 416087		

The described instrument has been calibrated at Caltek laboratory under the ambient conditions stated above.

This certificate provides traceability of measurement to the International System of Units (SI) and/or to units of measurement realised at the National Metrology Centre (NMC) , Singapore or other recognized national metrology institutes.

The calibration method was carried out according to In-house Technical Calibration Procedure CTTM-M16:2007, as guide.

S.No.	REFERENCE INSTRUMENT(S)	SERIAL NO	DUE DATE
1	Acoustical Calibration System	278827	18-Jul-24

Results of Calibration

- 1 The expanded uncertainty of measurement associated with the calibration is estimated at a confidence level of approximately 95 %.
- 2 The user should determine the suitability of the instrument for its intended use.
- 3 No Adjustments done.

Calibrated By : Puthanpuraparumbu Majeed Shanavas EMP ID : 1250	Approved By : Ananthakumar Sivasamy EMP ID : 1007
---	---

This certificate may not be reproduced other than in full, except with the prior written approval of the issuing Laboratory.

TERMS AND CONDITIONS GOVERNING TECHNICAL SERVICES PROVIDED BY CALTEK PTE LTD

1. REQUEST PROCEDURES

- a. A Job receipt/ Works order, Purchase Order, Acknowledgement, Confirmation Letter or email from the client shall be submitted to Caltek on/or at the time the equipment/ service is delivered or requested to/or by Caltek Pte Ltd. This document shall provide clear instructions of the shipping, billing and reporting details and requirements.
- b. Caltek will assign a unique number to each item or service upon acceptance of the item or service by Caltek.

2. CLIENT'S UNDERTAKINGS

- a. The Client shall supply the necessary accessories and /or information or data if any to enable Caltek to perform the services stated in the document. Caltek shall be under no obligation to perform the services unless and until it has received confirmation from the Client.
- b. The Client warrants that all information and data supplied is accurate and correct in all respects and shall indemnify Caltek for all loss and damages suffered by Caltek due to any inaccuracy or error in the information and data.

3. CALTEK SERVICES

- a. The equipment/ service submitted for calibration/testing shall be compatible with the client's specifications, upon receipt. When equipment is received it will be inspected physically, and if found to be faulty or below a certain standard the Client will be informed accordingly. The Client or his representative may be present at the time of the inspection, failing which; Caltek's findings will be final.
- b. If equipment defects necessitating repair are found after Services has commenced, the Client will be notified and Caltek shall be under no obligation to continue further until the defects are rectified by the Client. A fee will be charged by Caltek for the work done.

4. CALIBRATION/ TEST REPORTS

- a. The report shall not be used in any publicity material without prior consent of Caltek. The report may not be reproduced in part or in full unless approved in writing has been given by Caltek.
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Tel: (65) 64520300 Fax: (65) 64520500
Email: info@caltekgroup.com Website: www.caltekgroup.com

CALIBRATION CERTIFICATE

CERTIFICATE NUMBER	:	CTP 1836-24	JR NO	:	JR-11536
INSTRUMENT CODE	:	100024-10180	PAGE NUMBER	:	2 of 2

Calibration Results(As Found)

Function Test @ 1kHz

Reference Reading	Unit	Mean Instrument Reading	Error	K Factor	Expanded Uncertainty
94.0	dBA	94.0	0.00	2.00	0.3
114.0	dBA	114.0	0.00	2.00	0.4

Calibrated By :

Puthanpuraparumbu
Majeed Shanavas

EMP ID : 1250

Approved By :

Ananthakumar
Sivasamy

EMP ID : 1007

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CALIBRATION CERTIFICATE

CERTIFICATE NUMBER	: CTP 1836-24	JR NO	: JR-11536
INSTRUMENT CODE	: 100024-10180	PAGE NUMBER	: 1 of 2

Instrument	: SOUND METER	Ambient Temperature	: (23±5)°C
Manufacturer	: UNI-T	Relative Humidity	: (55±10)%r.h.
Model No	: UT353	Received Date	: 18-Apr-24
Part No	: -	Date of Calibration	: 22-Apr-24
Serial No	: C203058495	Recommended Due Date	: 22-Apr-25
Range	: -	Issue Date	: 22-Apr-24
Asset/Tag/Id/Code	: -	Job Number	: CCJR24-3432
Customer	: INTAC SYSTEMS SOLUTION PTE LTD, Blk 1, Kaki Bukit Avenue 3, #04-03 KB-1, Singapore, 416087		

The described instrument has been calibrated at Caltek laboratory under the ambient conditions stated above.

This certificate provides traceability of measurement to the International System of Units (SI) and/or to units of measurement realised at the National Metrology Centre (NMC) , Singapore or other recognized national metrology institutes.

The calibration method was carried out according to In-house Technical Calibration Procedure CTTM-M16:2007, as guide.

S.No.	REFERENCE INSTRUMENT(S)	SERIAL NO	DUE DATE
1	Acoustical Calibration System	278827	18-Jul-24

Results of Calibration

- 1 The expanded uncertainty of measurement associated with the calibration is estimated at a confidence level of approximately 95 %.
- 2 The user should determine the suitability of the instrument for its intended use.
- 3 No Adjustments done.

Calibrated By : Puthanpuraparumbu Majeed Shanavas EMP ID : 1250	Approved By : Ananthakumar Sivasamy EMP ID : 1007
---	---

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Calibrated By :

Puthanpuraparumbu
Majeed Shanavas

EMP ID : 1250

Approved By :

Ananthakumar
Sivasamy

EMP ID : 1007

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www.caltekgroup.com | info@caltekgroup.com

CALIBRATION CERTIFICATE

CERTIFICATE NUMBER : CTP 1617M-24
DATE RECEIVED : 20-Sep-24

JOB NUMBER : CCJR 24-7207
ISSUE DATE : 20-Sep-24

Instrument	: VANE ANEMOMETER	Ambient Temperature	: (23 ± 5) °C
Manufacturer	: TESTO	Relative Humidity	: (55 ± 10) % r.h.
Model No.	: 416	Date Calibrated	: 20-Sep-24
Part No.	: --	Recommended Due Date	: 20-Sep-25
Serial No.	: 84211700		
Customer	: INTAC SYSTEMS SOLUTION PTE LTD	Range	: --
	Blk 1 Kaki Bukit Avenue 3	(Tag No.)	: --
	#04-03 KB-1	Page	: 1 of 2
	Singapore 416087	Status	: As Found

The described instrument has been calibrated at **Caltek Laboratory** under the ambient conditions stated above.

This certificate provides traceability of measurement to the International System of Units (**SI**) and/or to units of measurement realised at the National Metrology Centre (**NMC**), Singapore or other recognized national metrology institutes.

METHOD : The calibration method was carried out according to In-house Technical Calibration Procedure CTTM - M19:2007 as a guide.

REFERENCE INSTRUMENT(S)	SERIAL NO	DUE DATE
1. Air Speed Calibration System	83042938/20696948	9-Nov-24

RESULTS OF CALIBRATION

1. The results of calibration are given on the attached calibration data sheet(s).
2. The expanded uncertainty of measurement associated with the calibration is 2.0 % of reading estimated at a level of confidence of approximately 95 % with a coverage factor of k=2.00.
3. The user should determine the suitability of the instrument for its intended use.

Calibrated by :
SHANAVAS P.M.
EMP ID: 1250

Approved by :
PREMKUMAR. S
EMP ID: 1303

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MECHANICAL VENTILATION SYSTEM FUNCTIONAL TEST



INTAC SYSTEMS SOLUTION PTE LTD
新特系統有限公司
801 Anak Buah Avenue 3, #G-1, #403, Marina One, 09898, Singapore 460089
Tel: +65 6842 7118 | Fax: +65 6842 7119 | Email: info@intacsolution.com.sg
Company GST Reg No: 209602771H | Website: www.intacsolution.com

BLK-2 level-3

03-02

Project No.: D2019-00162/ISS/ACMV-BLK 2-03
Project Site: DIEPPE BARRACK – BLOCK 2

Reference: _____
Test Date: _____

CP/BLK2-L3-01	Observation	Result	Remarks
1. General			
a. Verify enclosure of system control panel	Yes / <input checked="" type="checkbox"/>		
• Proper labelling of system control panel			
b. Turn on incoming power supply and check working	Yes / <input checked="" type="checkbox"/>		
• Incoming power supply lights			
2. Manual Operation			
a. Select AOM selector switch to 'M' position and verify the following system operations:			
• Press 'Start' button, Fan 'Run' indicator light 'On'	Yes / <input checked="" type="checkbox"/>		
• Press 'Stop' button, Fan 'Stop' indicator light 'On'	Yes / <input checked="" type="checkbox"/>		
3. Automatic / Interlocking Operation			
a. Simulating Lighting 'On'	Yes / <input checked="" type="checkbox"/>		
• Motorized Damper 'Open'	Yes / <input checked="" type="checkbox"/>		
• FAF 'On'	Yes / <input checked="" type="checkbox"/>	No	
• EAF 'On'	Yes / <input checked="" type="checkbox"/>		
• TEAF 'On'	Yes / <input checked="" type="checkbox"/>		
b. Simulating AC 'On'	Yes / <input checked="" type="checkbox"/>		
• FAF 'On'			
c. Simulating Fire Alarm Signal Activated	Yes / <input checked="" type="checkbox"/>		
• Motorized Damper 'Close'	Yes / <input checked="" type="checkbox"/>		
• EAF 'Off'	Yes / <input checked="" type="checkbox"/>	No	
• FAF 'Off'	Yes / <input checked="" type="checkbox"/>		
d. Simulating Hydrogen Sensor Alarm Activated	Yes / <input checked="" type="checkbox"/>		
• Motorized Damper 'Open'	Yes / <input checked="" type="checkbox"/>		
• EAF 'On'	Yes / <input checked="" type="checkbox"/>	No	
• FAF 'On'	Yes / <input checked="" type="checkbox"/>		
4. System Protection			
a. Simulating Overload Trip	Yes / <input checked="" type="checkbox"/>		
• Fan 'Trip', Fan 'Trip' indicator light 'On'	Yes / <input checked="" type="checkbox"/>		
• Clear the 'Trip', 'Trip' indicator light 'Off'	Yes / <input checked="" type="checkbox"/>		

TESTED BY / DATE: 18/11/24

J. Alex / J. Ryt
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE:

WITNESSED BY / DATE:

RTO

Moe Thank Tun
10/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

MECHANICAL VENTILATION SYSTEM FUNCTIONAL TEST



INTAC SYSTEMS SOLUTION PTE LTD
怡和系统有限公司
601 Tanjong Katong Road #06-05 Singapore 436061
Tel: +65 6442 7116 | Fax: +65 6442 7119 | Email: intac@intacs.com
Company GST Reg No: 209650331H | Website: www.intacs.com

BLK 2 - Level 3

#03-08
03-09

Project No.: D2019-00162/ISS/ACMV-BLK 2-03
Project Site: DIEPPE BARRACK – BLOCK 2

Reference: _____
Test Date: _____

CP/BLK2-L3-02	Observation	Result	Remarks
1. General			
a. Verify enclosure of system control panel	Yes / <u>No</u>		
• Proper labelling of system control panel			
b. Turn on incoming power supply and check working	Yes / <u>No</u>		
• Incoming power supply lights			
2. Manual Operation			
a. Select AOM selector switch to 'M' position and verify the following system operations:			
• Press 'Start' button, Fan 'Run' indicator light 'On'	Yes / <u>No</u>		
• Press 'Stop' button, Fan 'Stop' indicator light 'On'	Yes / <u>No</u>		
3. Automatic / Interlocking Operation			
a. Simulating Lighting 'On'	Yes / <u>No</u>		
• Motorized Damper 'Open'	Yes / <u>No</u>	<u>Na</u>	
• FAF 'On'	Yes / <u>No</u>		
• EAF 'On'	Yes / <u>No</u>		
• TEAF 'On'	Yes / <u>No</u>		
b. Simulating AC 'On'	Yes / <u>No</u>		
• FAF 'On'			
c. Simulating Fire Alarm Signal Activated	Yes / <u>No</u>		
• Motorized Damper 'Close'	Yes / <u>No</u>	<u>Na</u>	
• EAF 'Off'	Yes / <u>No</u>		
• FAF 'Off'	Yes / <u>No</u>		
d. Simulating Hydrogen Sensor Alarm Activated	Yes / <u>No</u>		
• Motorized Damper 'Open'	Yes / <u>No</u>	<u>Na</u>	
• EAF 'On'	Yes / <u>No</u>		
• FAF 'On'	Yes / <u>No</u>		
4. System Protection			
a. Simulating Overload Trip	Yes / <u>No</u>		
• Fan 'Trip', Fan 'Trip' indicator light 'On'	Yes / <u>No</u>		
• Clear the 'Trip', 'Trip' indicator light 'Off'	Yes / <u>No</u>		

TESTED BY / DATE: 18/11/24

J. Alex / J. Ray
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE:

WITNESSED BY / DATE:

Moe Thank-Tun
RTO
10/11/2024

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

MECHANICAL VENTILATION SYSTEM FUNCTIONAL TEST



INTAC SYSTEMS SOLUTION PTE LTD
新嘉坡系統有限公司
60, Jalan Batu 4A/1, Gurney Drive, 119300, Singapore
Tel: +65 6842 7316 | Fax: +65 6842 7316 | Email: info@intacsolution.com.sg
Company GST Reg No: 2005047116 | Website: www.intacsolution.com

Blk2 - Level-3
03-11
03-12
03-13
03-14

Project No.: D2019-00162/ISS/ACMV-BLK 2-03
Project Site: DIEPPE BARRACK – BLOCK 2

Reference: _____
Test Date: _____

CP/BLK2-L3-03	Observation	Result	Remarks
1. General			
a. Verify enclosure of system control panel	Yes / No		
• Proper labelling of system control panel			
b. Turn on incoming power supply and check working	Yes / No		
• Incoming power supply lights			
2. Manual Operation			
a. Select AOM selector switch to 'M' position and verify the following system operations:			
• Press 'Start' button, Fan 'Run' indicator light 'On'	Yes / No		
• Press 'Stop' button, Fan 'Stop' indicator light 'On'	Yes / No		
3. Automatic / Interlocking Operation			
a. Simulating Lighting 'On'	Yes / No Na		
• Motorized Damper 'Open'	Yes / No		
• FAF 'On'	Yes / No		
• EAF 'On'	Yes / No Na		
• TEAF 'On'	Yes / No		
b. Simulating AC 'On'	Yes / No Na		
• FAF 'On'			
c. Simulating Fire Alarm Signal Activated			
• Motorized Damper 'Close'	Yes / No		
• EAF 'Off'	Yes / No Na		
• FAF 'Off'	Yes / No		
d. Simulating Hydrogen Sensor Alarm Activated			
• Motorized Damper 'Open'	Yes / No		
• EAF 'On'	Yes / No Na		
• FAF 'On'	Yes / No		
4. System Protection			
a. Simulating Overload Trip			
• Fan 'Trip', Fan 'Trip' indicator light 'On'	Yes / No		
• Clear the 'Trip', 'Trip' indicator light 'Off'	Yes / No		

TESTED BY / DATE: 18/11/2014

J. Alex / J. Ant.
ACMV CONTRACTOR
INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE:

WITNESSED BY / DATE:

RTO

Moe Thauk Tun
Moe Thauk Tun
10/11/2014

MAIN CONTRACTOR
DEENN ENGINEERING PTE. LTD.

**VENTILATION FAN
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
 BLOCK 1 KAKI BUKIT AVENUE 3
 #04-03 KB-1, SINGAPORE 416087
 Tel: +65 6842 7318 Fax: +65 6842 7319
 Email: intacss@intacss.com.sg

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Test Date : _____
 Project Site DIEPPE BARRACK-BLOCK 2

Location	03-02 MEETING ROOM		
1. General			
Type of Equipment			
Identification No.	FAF-2-L3-01		
Brand / Model	SYSTEMAIR/K150 XL SILEO		
2. Current Measurement (1Ø)			
Motor Rating (kW)	0.100		
Running Ampere (Amp) (Actual)	0.390		
3. Air Flow			
Airflow (CMH) (Design)	300		
Airflow (CMH) (Actual)	325		
4. Noise Measurement			
Motor RPM	2,523		
Equipment Off (dBA)	41.8		
Equipment On (dBA)	43.9		

TESTED BY / DATE : 18/11/24

J. Alex / J. D.Y.
 ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

WITNESSED BY / DATE :

RTO

Moe Thauk Tun
 10/4/2024

AIR BALANCING REPORT



INTAC SYSTEMS SOLUTION PTE LTD

BLOCK 1 KAKI BUKIT AVENUE 3
#04-03 KB-1, SINGAPORE 416087
Tel: +65 6842 7318 Fax: +65 6842 7319
Email: intacss@intacss.com.sg

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03
Project Site DIEPPE BARRACK-BLOCK 2 Test Date : _____

1. General

Type of Equipment	CIL	Identification No.	FAF-2-L3-01
Brand / Model	SYSTEMAIR/K150 XL SILEO	Capacity	360 CMH

2. Description

Location / Room No.	Grille Designation	Flexible Duct (Ø100mm)	Designed Air Velocity (m/s)	Designed Air Flow (m³/h)	Actual Air Velocity (m/s)	Actual Air Flow (m³/h)	
03-02 MEETING ROOM	1 (m²) =====>	0.00785	5.66	160	5.70	161	
	2 (m²) =====>	0.00785	5.66	160	5.80	164	
			Total	320		325	

REMARKS:

TESTED BY / DATE : 18/11/24

Alex

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

RTO

Moe Thank-Tun
20/11/2024

WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

FFL 33.540

HR

DP

Master
Control

IDS
SCREEN
03-02
MEETING

FULL GLASS PANEL
SHOWCASE & STORAGE CABINET

FULL GLASS PANEL
SHOWCASE & STORAGE CABINET

S3-03
ST3
23 m²
(NV)

UP = 31
R= 175.00
T= 275

CP-BLK2-L3-01

125 RD
NRD

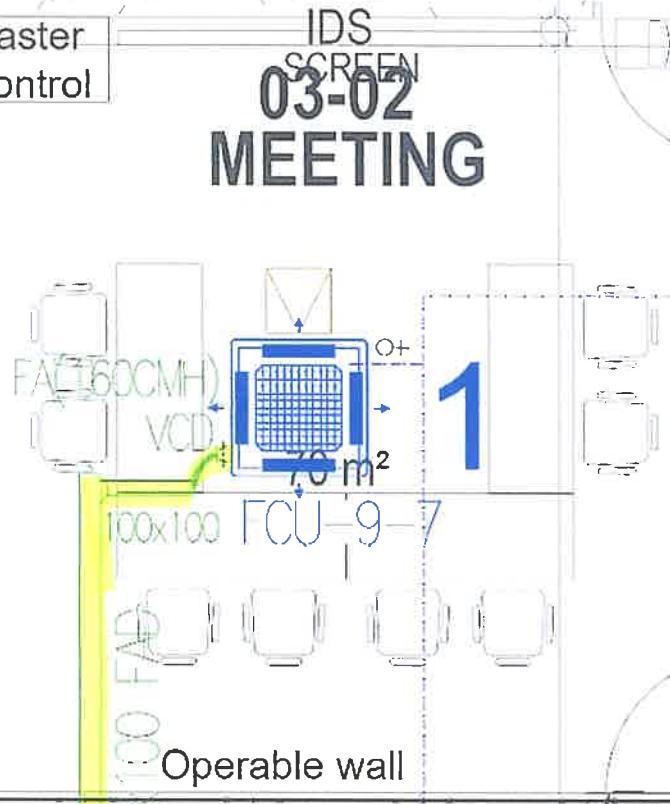
Wardrobe, Display & Safe in
Low Cabinetry

1500

IDS

FCU-11-1

Dy CGO



FFL 33.540

1800

WB

300x200 FAD

SCREEN
WB

300x300 FAD

PFCU-12-6

FA(160CMH)

**VENTILATION FAN
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
BLOCK 1 KAKI BUKIT AVENUE 3
#04-03 KB-1, SINGAPORE 416087
Tel: +65 6842 7318 Fax: +65 6842 7319
Email: intacss@intacss.com.sg

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Test Date : _____
Project Site DIEPPE BARRACK-BLOCK 2

Location	03-08 CONFERENCE ROOM/03-09 MEETING ROOM		
1. General			
Type of Equipment			
Identification No.	FAF-2-L3-02		
Brand / Model	SYSTEMAIR/K200 L SILEO		
2. Current Measurement (1Ø)			
Motor Rating (kW)	0.155		
Running Ampere (Amp) (Actual)	0.534		
3. Air Flow			
Airflow (CMH) (Design)	660		
Airflow (CMH) (Actual)	673		
4. Noise Measurement			
Motor RPM	2,638		
Equipment Off (dBA)	43.0		
Equipment On (dBA)	44.6		

TESTED BY / DATE : 18/11/24

J. Alex / J. A.
ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

RTO

Moe Thauk Tun
20/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

AIR BALANCING REPORT



INTAC SYSTEMS SOLUTION PTE LTD

BLOCK 1 KAKI BUKIT AVENUE 3
#04-03 KB-1, SINGAPORE 416087
Tel: +65 6842 7318 Fax: +65 6842 7319
Email: intacss@intacss.com.sg

Project / Drawing No.

D2019-00162/ISS/ACMV-BLK 2-03

Project Site

DIEPPE BARRACK-BLOCK 2

Test Date :

1. General

Type of Equipment	CIL	Identification No.	FAF-2-L3-02
Brand / Model	SYSTEMAIR/K200 L SILEO	Capacity	660 CMH

2. Description

Location / Room No.	Grille Designation	Flexible Duct ($\varnothing 100\text{mm}$)	Designed Air Velocity (m/s)	Designed Air Flow (m ³ /h)	Actual Air Velocity (m/s)	Actual Air Flow (m ³ /h)	
03-08 CONFERENCE ROOM	1 (m ²) =====>	0.00785	7.08	200	7.10	201	
	2 (m ²) =====>	0.00785	7.08	200	7.20	203	
03-09 MEETING ROOM	3 (m ²) =====>	0.00785	4.60	130	4.70	133	
	4 (m ²) =====>	0.00785	4.60	130	4.80	136	
			Total	660		673	

REMARKS:

TESTED BY / DATE : 18/11/24

J. Alex/J. Qy

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

RTO

moe
moe Thanh Ton
20/11/2024

WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

FFL 33.4

CP-BLK2-3-03
PASSAGEWAY-3-02

FFL 33.540

FFL 33.540

SCREEN WB

03-08
CONFERENCE

FQJ-11-44 m²
(AC)

FOU-11-5
CONFERENCE

FQJ-11-5
CONFERENCE

SCREEN WB

AV RACKS
COMPT.

3
FQJ-11-5
03-09
WAITING ROOM
4
35 m²
(AC)

S3-04
ST4
23 m²
(NV)

UP-34
R=175.00
T=275

125 WB

IDS

150x150 FAD

200x200 FAD

300x300 FAD

400x400 FAD

500x500 FAD

700x700 FAD

900x900 FAD

1100x1100 FAD

1300x1300 FAD

1500x1500 FAD

1700x1700 FAD

1900x1900 FAD

2100x2100 FAD

2300x2300 FAD

2500x2500 FAD

2700x2700 FAD

2900x2900 FAD

3100x3100 FAD

3300x3300 FAD

3500x3500 FAD

3700x3700 FAD

3900x3900 FAD

4100x4100 FAD

4300x4300 FAD

4500x4500 FAD

4700x4700 FAD

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30900x30900 FAD

31100x31100 FAD

31300x31300 FAD

31500x31500 FAD

31700x31700 FAD

31900x31900 FAD

32100x32100 FAD

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32500x32500 FAD

32700x32700 FAD

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40100x40100 FAD

40300x40300 FAD

40500x40500 FAD

40700x40700 FAD

40900x40900 FAD

41100x41100 FAD

41300x41300 FAD

41500x41500 FAD

41700x41700 FAD

41900x41900 FAD

42100x42100 FAD

42300x42300 FAD

42500x42500 FAD

42700x42700 FAD

42900x42900 FAD

43100x43100 FAD

43300x43300 FAD

43500x43500 FAD

43700x43700 FAD

43900x43900 FAD

44100x44100 FAD

44300x44300 FAD

44500x44500 FAD

44700x44700 FAD

44900x44900 FAD

45100x45100 FAD

45300x45300 FAD

45500x45500

**VENTILATION FAN
PERFORMANCE TEST**



INTAC SYSTEMS SOLUTION PTE LTD
BLOCK 1 KAKI BUKIT AVENUE 3
#04-03 KB-1, SINGAPORE 416087
Tel: +65 6842 7318 Fax: +65 6842 7319
Email: infacss@Intacs.com.sg

Project / Drawing No. D2019-00162/ISS/ACMV-BLK 2-03 Test Date : _____
Project Site DIEPPE BARRACK-BLOCK 2

Location	03-11/12/13/14 NCR ROOM		
1. General			
Type of Equipment			
Identification No.	FAF-2-L3-03		
Brand / Model	SYSTEMAIR/K100 M SILEO		
2. Current Measurement (1Ø)			
Motor Rating (kW)	0.031		
Running Ampere (Amp) (Actual)	0.160		
3. Air Flow			
Airflow (CMH) (Design)	80		
Airflow (CMH) (Actual)	88		
4. Noise Measurement			
Motor RPM	2,407		
Equipment Off (dBA)	43.0		
Equipment On (dBA)	44.6		

TESTED BY / DATE : 18/11/24

J. Alex / J. Day

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

WITNESSED BY / DATE :

RTO

Moe
Moe Thauk Tun
20/11/2024

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

AIR BALANCING REPORT



INTAC SYSTEMS SOLUTION PTE LTD

BLOCK 1 KAKI BUKIT AVENUE 3
#04-03 KB-1, SINGAPORE 416087
Tel: +65 6842 7318 Fax: +65 6842 7319
Email: intacss@intacss.com.sg

Project / Drawing No.

D2019-00162/ISS/ACMV-BLK 2-03

Project Site

DIEPPE BARRACK-BLOCK 2

Test Date :

1. General

Type of Equipment	CIL	Identification No.	FAF-2-L3-03
Brand / Model	SYSTEMAIR/K100 M SILEO	Capacity	80 CMH

2. Description

Location / Room No.	Grille Designation	Grille Size (70% Free Area)	Designed Air Velocity (m/s)	Designed Air Flow (m³/h)	Actual Air Velocity (m/s)	Actual Air Flow (m³/h)	
03-11 NCR ROOM	1 (m²) =====>	100 x 100 0.00700	0.79	20	0.90	23	
03-12 NCR ROOM	2 (m²) =====>	100 x 100 0.00700	0.79	20	0.80	20	
03-13 NCR ROOM	3 (m²) =====>	100 x 100 0.00700	0.79	20	0.90	23	
03-14 NCR ROOM	4 (m²) =====>	100 x 100 0.00700	0.79	20	0.90	23	
			Total	80		88	

REMARKS:

TESTED BY / DATE : 18/11/24

Alex Jia-ay

ACMV CONTRACTOR

INTAC SYSTEMS SOLUTION PTE LTD

WITNESSED BY / DATE :

RTO

Moe Thank-Tun
20/11/2024

WITNESSED BY / DATE :

MAIN CONTRACTOR

DEENN ENGINEERING PTE. LTD.

HR

FFL 33.540

ANCIILLARY OFFICE

Printing
Corner

03-15

FCU-15-1

FRONDESK
COUNTER

1900

725

1025

TITT

03-14

FCU-17A-4

8 m²

FCU-17B-4

9 m²

TYPE E

2 2

TYPE E

03-10
STORE

4 m²

(AC)

(AC)

(AC)

100x100FAG
@ 20 CMH

03-13

03-12

03-11

ACP-BLK2-L3-02

ACP-BLK2-L3-03

ACP-BLK2-L3-04

TIT AC

TIT AC

TIT AC

03-14

03-12

03-11

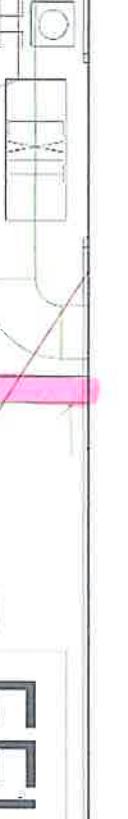
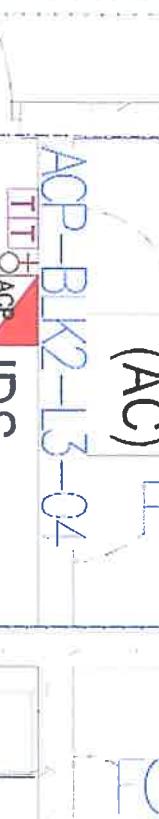
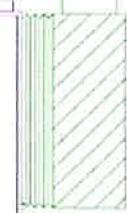
TIT AC

TIT AC

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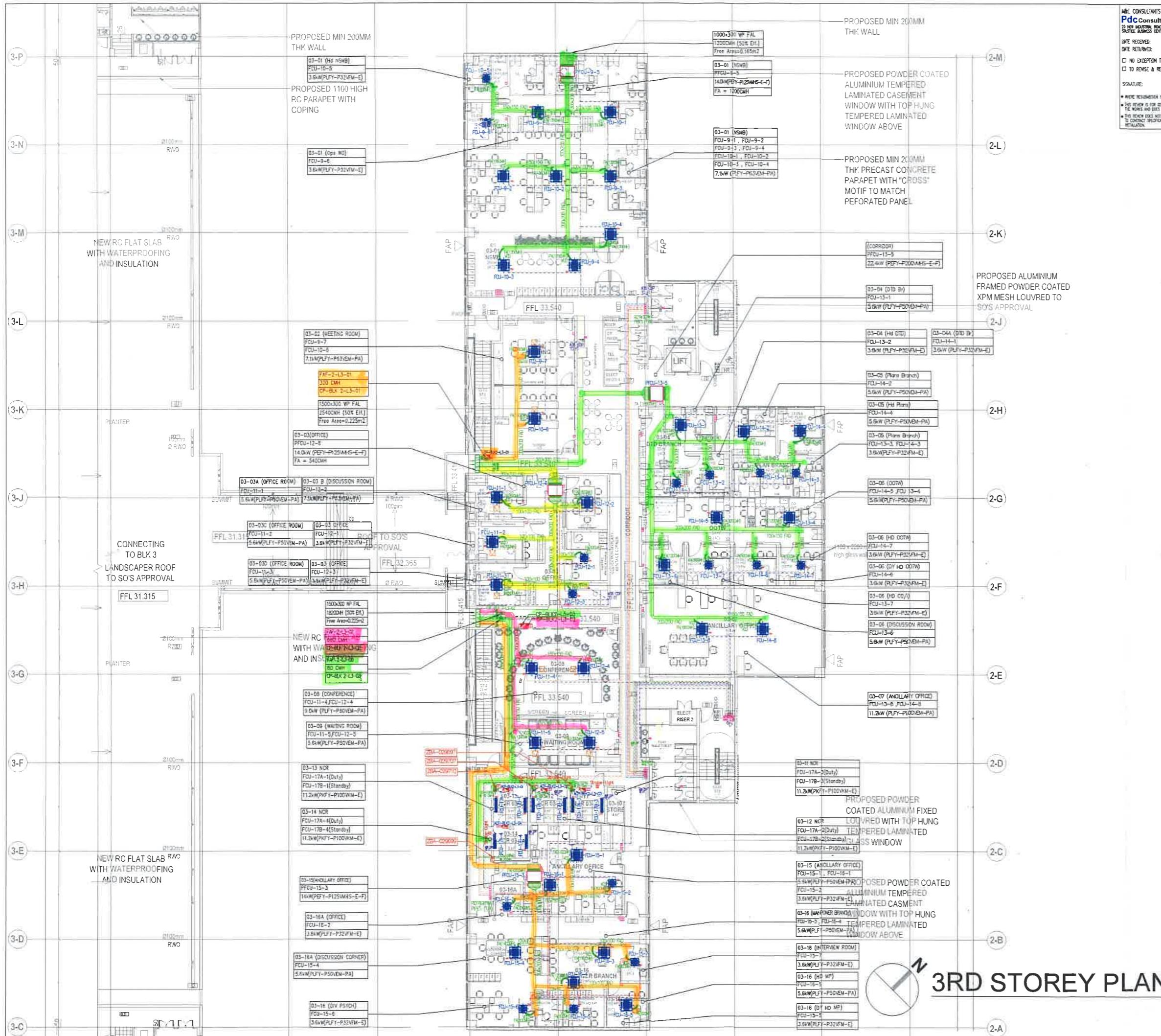
WB

FA(920CMH)



HR

2000



3RD STOREY PLAN

S/N	Fan Reference	Area Served	Capacity (CMH)	SP (Pa)	Brand / Model Offered	Type	Fan Dimension	Motor Rating (kW)	Full Load Current (Amp)	Fan Speed (rpm)	Supply (V/Ph/Hz)	Class	dBA (3m)	Wt. (kg)	Qty	Silencer Model	Silencer Qty	Spring Isolator Model	Spring Isolator Qty	Control Logic	Control Panel Designation	Power Requirement	
																							Mechanical Ventilation Equipment Schedule
1	FAF-2-L1-01	DC ROOM (01-13,01-14&01-15)	1640	150	SYSTEMAIR	PRIQ 250E2	CIL	250	0.194	0.845	2692	230/1φ/50	F/44	48	5.55	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L1-01	20A(1φ)
2	FAF-2-L1-02	DC ROOM(01-16, 01-17 & 01-18)	1240	150	SYSTEMAIR	K315 L SILEO	CIL	315	0.324	1.41	2403	230/1φ/50	F/44	52	7	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L1-02	20A(1φ)
3	FAF-2-L1-03	01-09 NCR(S),01-10 NCR (C) & 01-11 ELE-ROOM	70	100	SYSTEMAIR	K100 M SILEO	CIL	100	0.031	0.177	2407	230/1φ/50	B/44	38	2.3	1	-	-	-	-	Interlock With Lighting	CP-BLK2-L1-03	20A(1φ)
4	FAF-2-L1-04	NCR (01-02,01-03,01-05,01-06)	210	150	SYSTEMAIR	K150 XL SILEO	CIL	150	0.100	0.443	2523	230/1φ/50	F/44	48	4.1	1	-	-	-	-	Interlock With Lighting	CP-BLK2-L1-04	20A(1φ)
5	FAF-2-L1-05	01-12 GROWTH	300	100	SYSTEMAIR	K150 XL SILEO	CIL	150	0.100	0.443	2523	230/1φ/50	F/44	48	4.1	1	-	-	-	-	Interlock With Lighting	CP-BLK2-L1-05	20A(1φ)
6	FAF-2-L1-06	IIDS ROOM (01-19 TO 01-24)	920	150	SYSTEMAIR	K315 M SILEO	CIL	315	0.201	0.882	2520	230/1φ/50	F/44	48	5.5	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L1-06	20A(1φ)
7	EXFAF-2-L1-01	01-08 BATTERY ROOM	1850	100	SYSTEMAIR	KTEX 50-30-4 EX PROOF	520x340	0.888	1.770	2552	400/3φ/50	F/44	57	22.8	1	-	-	-	-	-	Interlock With Hydrogen Sensor & Fire Alarm	CP-EAF-BLK2-L1-01	20A(3φ)
8	FAF-2-L2-01	02-02 O-ROOM, 02-03 TRAINING	540	150	SYSTEMAIR	K200 L SILEO	CIL	200	0.155	0.682	2638	230/1φ/50	F/44	43	4.8	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L2-01	20A(1φ)
9	FAF-2-L2-02	02-05 BF ROOM, 02-06 R-ROOM	520	150	SYSTEMAIR	K315 M SILEO	CIL	315	0.201	0.882	2520	230/1φ/50	F/44	48	5.5	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L2-02	20A(1φ)
10	FAF-2-L2-03	02-08 TO 02-12 OFFICE	960	150	SYSTEMAIR	K315 M SILEO	CIL	315	0.201	0.882	2520	230/1φ/50	F/44	48	5.5	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L2-03	20A(1φ)
11	FAF-2-L2-04	02-04B STORE	100	100	SYSTEMAIR	K100 XL SILEO	CIL	100	0.052	0.227	2418	230/1φ/50	F/44	45	3	1	-	-	-	-	Interlock With Lighting	CP-BLK2-L2-04	20A(1φ)
12	TEAF-2-L2-01	T2-02 FEMALE TOILET	300	100	SYSTEMAIR	K150 XL SILEO	CIL	150	0.100	0.443	2523	230/1φ/50	F/44	48	4.1	1	-	-	-	-	Interlock With Lighting	CP-TEAF-BLK2-L2-01	20A(1φ)
13	FAF-2-L3-01	03-02 MEETING	320	150	SYSTEMAIR	K150 XL SILEO	CIL	150	0.100	0.443	2523	230/1φ/50	F/44	48	4.1	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L3-01	20A(1φ)
14	FAF-2-L3-02	03-08 CONFERENCE, 03-09 WAITING ROOM	660	150	SYSTEMAIR	K200 L SILEO	CIL	200	0.155	0.682	2638	230/1φ/50	F/44	43	4.8	1	-	-	-	-	Interlock With FCU's	CP-BLK2-L3-02	20A(1φ)
15	FAF-2-L3-03	NCR (03-11 TO 03-14)	80	100	SYSTEMAIR	K100 M SILEO	CIL	100	0.031	0.177	2407	230/1φ/50	B/44	38	2.3	1	-	-	-	-	Interlock With Lighting	CP-BLK2-L3-03	20A(1φ)

M&E CONSULTANTS
Pdc Consultants Pte Ltd
 23 NEW INDUSTRIAL ROAD #06-11
 SINGAPORE BUSINESS CENTER SINGAPORE 500023
 Tel: 6444 7748 Fax: 6444 7111

DATE RECEIVED: NO EXCEPTION TAKEN MAKE CORRECTIONS NOTED PRIOR TO GENERAL USE
 DATE RETURNED: TO REVERSE & RESUBMIT REJECTED & RESUBMIT

SIGNATURE

• THIS REVIEW IS FOR GENERAL ARRANGEMENT ONLY AND DOES NOT ENTITLE THE CONTRACTOR OR HIS SUBCONTRACTORS TO GETTING OUT OF THE WORKS AND DOES NOT RELEASE THE CONTRACTOR OR HIS SUBCONTRACTORS TO ENFORCE FULL COMPLIANCE WITH THE CONTRACT SPECIFICATION, OTHER DRAWINGS AND STANDING REQUIREMENT HAVING JURISDICTION OVER THE INSTALLATION.

AS-BUILT DRAWING
 Project Ref No : A2105-00599-2022

DSTA
 Defence Science & Technology Agency

PEH SOEH CHN
 Head, Airframe Control

EDMUNDO TEO KUAN WEI
 Senior Programme Manager

Man Contractor:
DEENN ENGINEERING PTE LTD
 29 Harrison Road, Lian Seng Building , Singapore 399649
 Tel: 6283 1468 FAX No: 6280 9380
 e-mail : lanbenge.com@pacific.net.sg
 Website : www.lanbenge.com.sg

Architect:
ID ARCHITECTS PTE LTD
 3 HarbourFront Plaza, #03-01,
 HarbourFront Tower Two,
 Singapore 098244
 Tel: 6225 8011
 Fax: 6225 8022
 general@idarchitects.com.sg
www.idarchitects.com.sg

Structure:
TW-ASIA Consultants Pte Ltd
 NO. 28 SIN MINC LANE #04-137 MIDVIEW CITY
 SINGAPORE 373972 Tel : 62916292 FAX : 62932196

M&E Consultant:
Pdc Consultants Pte Ltd
 MECHANICAL + ELECTRICAL
 Paya Lebar Square #10-17/18 (Office Lobby 1)
 60 Paya Lebar Road Singapore 409971
 Tel: 6444 7748 Fax: 6444 7111
 e-mail: pdcong@pdcong.com

Sub Contractor:
INTAC SYSTEMS SOLUTION PTE LTD
 BLOCK 1 KAM BUNT MEDIUM 5
 69-69A 16A, SINGAPORE 419057
 Tel: +65 6843 7746 Fax: +65 6843 7997
 Email: info@intacsolutions.com

Project No:
 D2019-00162

Project Title:
 PROPOSED ADDITIONS OF 1 BLOCK OF 3-STORY OFFICE BUILDING BLK 2, 1 BLOCK OF 6-STORY ACCOMMODATION BUILDING BLK 3 (11), 1 BLOCK OF 4-STORY ACCOMMODATION BUILDING BLK 4 (10), 1 BLOCK OF 2-STORY TRAINING MULTIPLEX BLK 9 (6), 1 BLOCK OF MSVS BLK 10 (9), AND ANCILLARY FACILITIES BLK 5, 6(4) & 8 TO EXISTING DIEPPE BARRACK ON LOT 05019M MK13 AT SEMBAWANG ROAD (MANDAI PLANNING AREA)

Drawing title:
 BLOCK 2 - ACMV EQUIPMENT SCHEDULE-04

Initial	Date			
Drawn	MB	19/10/18	Scope	NTB
Checked	HK	19/10/18	Software	CAD
Approved			Revision no:	D2019-00162/ISS/ACMV-BLK 2-08 00

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 SINGAPORE 109941.
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23 Tagore Lane, #04-08/09/10/11 Tagore 23 Warehouse, Singapore 787601
Tel: (65) 64520300 Fax: (65) 64520500
Email: info@caltekgroup.com Website: www.caltekgroup.com

CALIBRATION CERTIFICATE

CERTIFICATE NUMBER	: CTP 1836-24	JR NO	: JR-11536
INSTRUMENT CODE	: 100024-10180	PAGE NUMBER	: 1 of 2

Instrument	: SOUND METER	Ambient Temperature	: (23±5)°C
Manufacturer	: UNI-T	Relative Humidity	: (55±10)%r.h.
Model No	: UT353	Received Date	: 18-Apr-24
Part No	:	Date of Calibration	: 22-Apr-24
Serial No	: C203058495	Recommended Due Date	: 22-Apr-25
Range	:	Issue Date	: 22-Apr-24
Asset/Tag/Id/Code	:	Job Number	: CCJR24-3432
Customer	: INTAC SYSTEMS SOLUTION PTE LTD, Blk 1, Kaki Bukit Avenue 3, #04-03 KB-1, Singapore, 416087		

The described instrument has been calibrated at Caltek laboratory under the ambient conditions stated above.

This certificate provides traceability of measurement to the International System of Units (SI) and/or to units of measurement realised at the National Metrology Centre (NMC), Singapore or other recognized national metrology institutes.

The calibration method was carried out according to In-house Technical Calibration Procedure CTTM-M16:2007, as guide.

S.No.	REFERENCE INSTRUMENT(S)	SERIAL NO	DUE DATE
1	Acoustical Calibration System	278827	18-Jul-24

Results of Calibration

- 1 The expanded uncertainty of measurement associated with the calibration is estimated at a confidence level of approximately 95 %.
- 2 The user should determine the suitability of the instrument for its intended use.
- 3 No Adjustments done.

Calibrated By : Puthanpuraparumbu Majeed Shanavas EMP ID : 1250	Approved By : Ananthakumar Sivasamy EMP ID : 1007
---	---

This certificate may not be reproduced other than in full, except with the prior written approval of the issuing Laboratory.

TERMS AND CONDITIONS GOVERNING TECHNICAL SERVICES PROVIDED BY CALTEK PTE LTD

1. REQUEST PROCEDURES

- a. A Job receipt/ Works order, Purchase Order, Acknowledgement, Confirmation Letter or email from the client shall be submitted to Caltek on/or at the time the equipment/ service is delivered or requested to/or by Caltek Pte Ltd. This document shall provide clear instructions of the shipping, billing and reporting details and requirements.
- b. Caltek will assign a unique number to each item or service upon acceptance of the item or service by Caltek.

2. CLIENT'S UNDERTAKINGS

- a. The Client shall supply the necessary accessories and /or information or data if any to enable Caltek to perform the services stated in the document. Caltek shall be under no obligation to perform the services unless and until it has received confirmation from the Client.
- b. The Client warrants that all information and data supplied is accurate and correct in all respects and shall indemnify Caltek for all loss and damages suffered by Caltek due to any inaccuracy or error in the information and data.

3. CALTEK SERVICES

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- b. If equipment defects necessitating repair are found after Services has commenced, the Client will be notified and Caltek shall be under no obligation to continue further until the defects are rectified by the Client. A fee will be charged by Caltek for the work done.

4. CALIBRATION/ TEST REPORTS

- a. The report shall not be used in any publicity material without prior consent of Caltek. The report may not be reproduced in part or in full unless approved in writing has been given by Caltek.
- b. The report issued hereunder is not a Certificate of Quality. It only applies to the sample of the specific equipment or service given at the time of its calibration or testing. The results shall not be used to indicate or imply that they are applicable to the similar items.
- c. In addition, such results must not be used to indicate or imply that Caltek approves, recommends or endorses the manufacturer, supplier or user of such equipment or that Caltek in any way "guarantees" the later performance of the equipment.

5. METHOD OF CALIBRATION/ TESTING

- a. The Laboratory will perform according to published certified standards or any other approved standards as discussed and agreed between the Client and Caltek. When it is necessary to employ Calibration or Test methods and procedures that

are non-standard, these shall be fully documented so as to provide traceability in case of dispute or replicated work when required.

6. SUB-CONTRACT

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CALIBRATION CERTIFICATE

CERTIFICATE NUMBER	: CTP 1836-24	JR NO	: JR-11536
INSTRUMENT CODE	: 100024-10180	PAGE NUMBER	: 2 of 2

Calibration Results(As Found)

Function Test @ 1kHz

Reference Reading	Unit	Mean Instrument Reading	Error	K Factor	Expanded Uncertainty
94.0	dBA	94.0	0.00	2.00	0.3
114.0	dBA	114.0	0.00	2.00	0.4

Calibrated By :

Puthanpuraparumbu
Majeed Shanavas

EMP ID : 1250

Approved By :

Ananthakumar
Sivasamy

EMP ID : 1007

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Tel: (65) 6452 0300 | Fax: (65) 6452 0500
www.caltekgroup.com | Info@caltekgroup.com

CALIBRATION CERTIFICATE

CERTIFICATE NUMBER : CTP 1617M-24
DATE RECEIVED : 20-Sep-24

JOB NUMBER : CCJR 24-7207
ISSUE DATE : 20-Sep-24

Instrument : VANE ANEMOMETER
Manufacturer : TESTO
Model No. : 416
Part No. : --
Serial No. : 84211700

Ambient Temperature : $(23 \pm 5)^\circ\text{C}$
Relative Humidity : $(55 \pm 10)\%$ r.h.
Date Calibrated : 20-Sep-24
Recommended Due Date : 20-Sep-25

Customer : INTAC SYSTEMS SOLUTION PTE LTD
Blk 1 Kaki Bukit Avenue 3
#04-03 KB-1
Singapore 416087

Range : --
(Tag No.) : --
Page : 1 of 2
Status : As Found

The described instrument has been calibrated at **Caltek Laboratory** under the ambient conditions stated above.

This certificate provides traceability of measurement to the International System of Units (**SI**) and/or to units of measurement realised at the National Metrology Centre (**NMC**) , Singapore or other recognized national metrology institutes.

METHOD : The calibration method was carried out according to In-house Technical Calibration Procedure CTTM - M19:2007 as a guide.

REFERENCE INSTRUMENT(S)

1. Air Speed Calibration System

SERIAL NO

83042938/20696948

DUE DATE

9-Nov-24

RESULTS OF CALIBRATION

1. The results of calibration are given on the attached calibration data sheet(s).
2. The expanded uncertainty of measurement associated with the calibration is 2.0 % of reading estimated at a level of confidence of approximately 95 % with a coverage factor of $k=2.00$.
3. The user should determine the suitability of the instrument for its intended use.

Calibrated by:

SHANAVAS P.M.
EMP ID: 1250

Approved by:

PREMKUMAR. S
EMP ID: 1303

TERMS AND CONDITIONS GOVERNING TECHNICAL SERVICES PROVIDED BY CALTEK PTE LTD

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CALIBRATION CERTIFICATE

CERTIFICATE NUMBER : CTP 1617M-24
ISSUE DATE : 20-Sep-24

JOB NUMBER : CCJR 24-7207
PAGE : 2 of 2

MEAN REFERENCE READING (m/s)	MEAN INSTRUMENT READING (m/s)		CORRECTION (m/s)
	Before adjustment	After adjustment	
2.50	2.5	—	0.00
5.00	4.9	—	0.10
10.00	9.9	—	0.10

Br

