

Dokument tittel:	PROSJEKTDOKUMENTASJON / FDV LED VMS RGB		
Prosjekt:	R3_Rv25 Ommangsvollen Grundset, Basthjørnet		
Prosjekt nr.:	100584		
Synopsis:	Ordre nr.: 771446		
Kunde:	Minel Land Elektriske AS	Versjon:	B
Byggherre:	-	Ant sider:	20

02	13.11.2019	Endring s 1, 5, 6	ALH	FW
01	08.11.2019	Første utgave	ALH	FW
Rev	Dato	Beskrivelse	Skrevet av	Godkjent av

1 Godkjent	☐	Sign.
2 Ikke godkjent	☐	Sign.
Kommentarer: 		

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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Innholdsfortegnelse

1	OM LED VMS RGB SKILT	3
2	GODKJENNINGER.....	4
3	SKILT	5
3.1	Prosess 77.16201.....	5
3.1.1	Pos V22, 23, 33 Variabel opplysningstavle	5
3.1.2	Pos V32, Variabel opplysningstavle.....	6
3.2	Prosess 77.163.....	7
3.2.1	V100, Variabel opplysningstavle.....	7
3.2.2	V101, Variabel opplysningstavle.....	8
4	MERKING.....	9
5	IP-ADRESSER	9
6	FESTEUTSTYR.....	10
6.1	Skiltefeste til NM-mast.....	10
7	SERVICE / VEDLIKEHOLD	11
8	VEDLEGG	12
8.1	TEGNINGER / SKJEMATIKK.....	12
8.1.1	Tegning modulskilt V22, V23, V100.....	12
8.1.2	Tegning modulskilt V32.....	14
8.1.3	Tegning modulskilt V33.....	16
8.1.4	Tegning modulskilt V101.....	18
8.2	Skjematikk ITS-kontroller m/OPC UA-server	20

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
------------------	-----------------------------	--------------------	--------	--------------	------------	-------------	----

1 OM LED VMS RGB SKILT

LED VMS RGB skilt er utviklet spesielt for krevende norske forhold.

TEKNISKE SPESIFIKASJONER

LED, elektronikk

Spredningsvinkel: B1, B2, B3, B4, B5 (EN12966)

Strømtrekket over diodene er lavere enn 60% av diodenes maksimale strømtrekk.

Diodetype: Epistar

Strømforsyning: 230Vac / 24VDC

Godkjenning: Godkjent i henhold til EN 12966-1:2005 + A1:2009

C2L3R2B4/T1, T2, T3/P3,
C2L3(*) R2B4/T1, T2, T3/P3,
C2L3(T)R0B4/T1, T2, T3/P3

Sert. nr. 0402-CPD-SC0543-13

Snøbrøytelast i henhold til

EN12899:2007 DSL4

Vindlast i henhold til N12899:2007

WL3

Tilkobling: Skruterminal på hurtigplugg eller rekkeklemme i koblingsboks.

Materiale og

overflatebehandling:

Front ramme: Sjøvannsbestandig aluminium, pulverlakkert

RAL 9017 Glans 3 - 10

Skiltkasse: Sjøvannsbestandig aluminium, pulverlakkert

RAL 9017, Glans 30

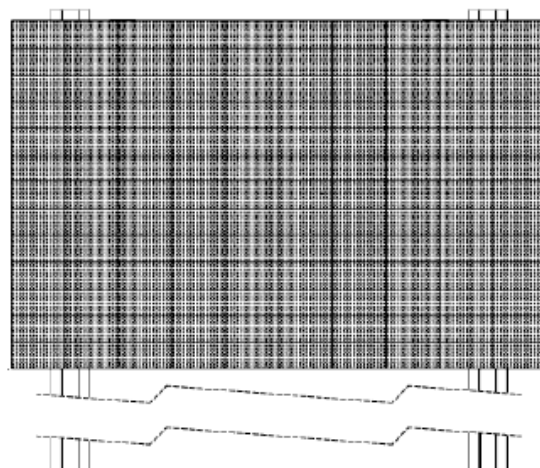
Skruer og festemateriell: Syrefast stål (A4-80)

RAL 9017. Glans 30.

Galvanisk skille.

Lagring og frakt:

Under frakt og lagring må skiltet stå oppreist i normalposisjon for drenering og lufting.



Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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2 GODKJENNINGER

Nemko **Statement of Conformity**
Ingress Protection (IP)

Order No.: 343684

Applicant: Euroskilt AS
Reservatveien 8
3118 Tønsberg
Norway

Manufacturer: Euroskilt AS a/s, Tønsberg
Reservatveien 8
3118 Tønsberg
Norway

Product: LED VMS cabinet

Models: LED VMS cabinet

Brand Name / Trade mark: 

Additional information: Metal enclosure made of aluminum profile system, dimension 900x900x150mm (height). Hinged door with three rubber seals in profile and two locking devices prepared for padlock.

IP classification: IP56 category 2

The above product is tested according to the following standards: EN 60529 (1991) + A1 (2000)
Degree of protection provided by enclosures (IP Code)
EN 12966 (2014), IP5X category 2
Road vertical signs Variable message traffic signs

IP56
Cat. 2

Nemko confirms that one sample of the mentioned product has been tested and found to be in conformity with the requirements for the degree of protection as specified above.

This statement gives no right to use Nemko's name or certification mark on the products.

Date 2017-12-12

Tested by: Finn-Tore Jørgensen

Approved by: Espen Eriksen

Nemko Group
Nemko AS, Gaustadalléen 30, P.O. Box 73 Blindern, 0314 Oslo, Norway
Tel: +47 22 96 03 30 Fax: +47 22 96 05 50 Email: info@nemko.com
Internet: www.nemko.com

Side 1 av 1

Nemko **Statement of Conformity**
Ingress Protection (IP)

Order No.: 343684

Applicant: Euroskilt AS
Reservatveien 8
3118 Tønsberg
Norway

Manufacturer: Euroskilt AS
Reservatveien 8
3118 Tønsberg
Norway

Product: LED VMS module

Models: LED VMS module

Brand Name / Trade mark: 

Additional information: Insulating enclosure with LED lenses in front. Backside cover with dual rubber seal and electrical connectors for power input and signal input.

IP classification: IP66

The above product is tested according to the following standards: EN 60529 (1991) + A1 (2000)
Degree of protection provided by enclosures (IP Code)

IP66

Nemko confirms that one sample of the mentioned product has been tested and found to be in conformity with the requirements for the degree of protection as specified above.

This statement gives no right to use Nemko's name or certification mark on the products.

Date 2017-12-12

Tested by: Finn-Tore Jørgensen

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Internet: www.nemko.com

Side 1 av 1

ISTITUTO GIORDANO
CE NOTIFIED BODY No. 0407

CERTIFICATE OF CONSTANCY OF PERFORMANCE
0407-CPR-1350 (IG-228-2017)

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction products

VARIABLE MESSAGE TRAFFIC SIGNS
identified as shown overleaf (Annex)
placed on the market by

YAHAM OPTOELECTRONICS CO., LTD.
Bldg A & Bldg D, Yongwei Industrial Park, #118 Yongfu Rd, Fuyong, Bao'an District, Shenzhen, China (PRC)
and produced in the manufacturing plant
Bldg A & Bldg D, Yongwei Industrial Park, #118 Yongfu Rd, Fuyong, Bao'an District, Shenzhen, China (PRC)

This certificate attests that all provisions concerning the assessment and verification of constancy of performance at system level and the performance described in Annex ZA of the standard

EN 12966-1:2005 + A1:2009

are applied and that

the products fulfil all the prescribed requirements.

This certificate was first issued on 30/10/2017 and will remain valid as long as the harmonized standard remains valid or the manufacturing conditions in the plant or the factory production control itself are not modified significantly.

Bellaria-Igea Marina - Italia, 30/10/2017
Revision No. 0

CPO Department Technical Manager
(Dott. Ing. Giuseppe Persano Adorno)

Chief Executive Officer
(Dott. Arch. Sara Lorenza Giordano)

The original of this document consists of an electronic document with a digital signature affixed pursuant to CPR (Prescribed Document 01/2017)

Sheet 1 of 2
ISTITUTO GIORDANO S.p.A. - Via Gioacchino Rossini, 2 - 47814 Bellaria-Igea Marina (RN) - Italia
www.giordano.it - info@giordano.it - PEC: ist-giordano@legalmail.it - tel. +39/0541/343030

Nemko **Test Report**
Electromagnetic Compatibility

Report No. E17198.00

Product	Euroskilt Traffic Variable Message Sign, LED RGB
Name and address of the applicant	Euroskilt AS Reservatveien 8 3118 Tønsberg Norway
Name and address of the manufacturer	Euroskilt AS Reservatveien 8 3118 Tønsberg Norway
Model	P20 and P16
Rating	230V AC 50Hz
Trademark	-
Serial number	-
Additional information	CI I
Tested according to	EN 50293:2012 EN 61000-3-2:2014 EN 61000-3-3:2013
Order number	335624
Tested in period	2017-08-24 and 2017-08-25
Issue date	2017-11-13
Name and address of the testing laboratory	Nemko Group Nemko AS Gaustadalléen 30, P.O. Box 73 Blindern, 0314 Oslo, Norway TEL: +47 22 96 03 30 FAX: +47 22 96 05 50

An accredited technical staff equipped under the Norwegian accreditation scheme

Prepared by [Lam Anh Dung] Approved by [Roger Berget]

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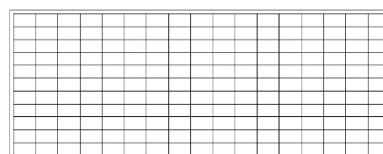
Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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3 SKILT

3.1 Prosess 77.16201

3.1.1 Pos V22, 23, 33 Variabel opplysningstavle

Skiltbilde:	743.2; Variabel opplysningstavle, Th. 175
Produktnr.	16017000010
Type:	RGB fullmatrise
Ansiktsmål (BxH)(mm):	5440 x 1760
Kassestørrelse (BxH)(mm):	5540 x 1860
Fargekode:	RAL 9017 glans 3 – 10 (front), glans 30 (kasse)
Antall:	Se ordrebekreftelse
Styring:	ITS-kontroller m/OPC UA-server
Feste:	Fester for NM-mast
Kabelgjennomføring:	M32, M20
Driftsspenning:	230VAC
Effekt maks:	2230W
Effekt nominell:	-
Diodeavstand:	P20
Vekt:	550 kg
El. tegninger:	Block Diagram



Pos 1

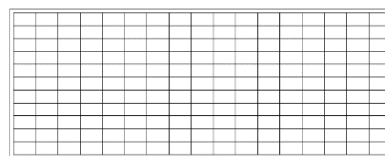


Pos 2

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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3.1.2 Pos V32, Variabel opplysningstavle

Skiltbilde:	743.2; Variabel opplysningstavle, Th. 175
Produkt nr.	16017000010
Type:	RGB fullmatrise
Ansiktsmål (BxH)(mm):	4900 x 1700 mm (+ 50mm)
Kassestørrelse (BxH)(mm):	4800 x 1600 mm
Fargekode:	RAL 9017 glans 3 – 10 (front), glans 30 (kasse)
Antall:	Se ordrebekreftelse
Styring:	ITS-kontroller m/OPC UA-server
Feste:	Fester for NM-mast
Kabelgjennomføring:	M32, M20
Driftsspenning:	230VAC
Effekt maks:	1700W
Effekt nominell:	-
Diodeavstand:	P20
Vekt:	550 kg
El. tegninger:	Block Diagram



Pos 1



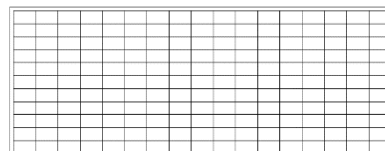
Pos 2

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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3.2 Prosess 77.163

3.2.1 V100, Variabel opplysningstavle

Skiltbilde:	743.2; Variabel opplysningstavle, Th. 175
Produktnr.	16017000010
Type:	RGB fullmatrise
Ansiktsmål (BxH)(mm):	5540 x 1860 (+ 50mm)
Kassestørrelse (BxH)(mm):	5440 x 1760 mm
Fargekode:	RAL 9017 glans 3 – 10 (front), glans 30 (kasse)
Antall:	Se ordrebekreftelse
Styring:	ITS-kontroller m/OPC UA-server
Feste:	Fester for NM-mast
Kabelgjennomføring:	M32, M20
Driftsspenning:	230VAC
Effekt maks:	2230W
Effekt nominell:	-
Diodeavstand:	P20
Vekt:	550 kg
El. tegninger:	Block Diagram



Pos 1

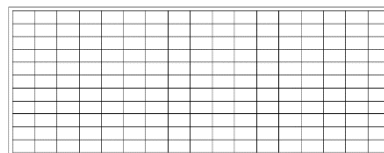


Pos 2

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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3.2.2 V101, Variabel opplysningstavle

Skiltbilde:	743.2; Variabel opplysningstavle, Th. 175
Produktnr.	16017000010
Type:	RGB fullmatrise
Ansiktsmål (BxH)(mm):	4900 x 1700 mm (+ 50mm)
Kassestørrelse (BxH)(mm):	4800 x 1600 mm
Fargekode:	RAL 9017 glans 3 – 10 (front), glans 30 (kasse)
Antall:	Se ordrebekreftelse
Styring:	ITS-kontroller m/OPC UA-server
Feste:	Fester for NM-mast
Kabelgjennomføring:	M32, M20
Driftsspenning:	230VAC
Effekt maks:	1700W
Effekt nominell:	-
Diodeavstand:	P20
Vekt:	550 kg
El. tegninger:	Block Diagram



Pos 1



Pos 2

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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4 MERKING

Nr.	Serienummer	Tag	Beskrivelse
1			RGB Fritekstskilt
2			RGB Fritekstskilt
3			RGB Fritekstskilt
4			RGB Fritekstskilt
5			RGB Fritekstskilt
6			RGB Fritekstskilt

5 IP-ADRESSER

IP-adresse	Beskrivelse	Pos tag SSA-skap

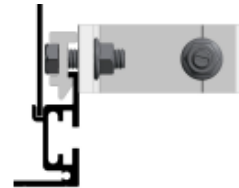
Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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6 FESTEUTSTYR

6.1 Skiltfeste til NM-mast

Følgende fester med glideskinne brukes for montering på Norsafe mast:

Varenr: 22330030019 NM190/290 Skiltfeste m/60mm glideskinne



Figur 6-1: Glideskinne

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	13.11.2019	Rev.	02
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7 SERVICE / VEDLIKEHOLD

For å holde frontplater rene må produktene inspiseres årlig og rengjøres for smuss.
For å unngå vanninntrenging med påfølgende kondensoppbygging og skader på elektronikk må det utføres kontroll av pakninger jevnlig.

Produktene tåler Statens Vegvesens normale vaskeprosedyrer. Det anbefales ikke å vaske skiltene fra undersiden/i underkant.

Ved bytte av styrekort må «Jumpere» settes lik utbyttet enhet (setter tilbakemeldinger og styrker).

Dette må settes før skiltet kobles til spenning. Se vedlagte skjemategninger for hvilke typer «jumpere» som er benyttet.

NB! Ved vedlikehold og bytte av enhet må enheten være strømløs og spenningsprøving må være foretatt.

Ved behov for service:

Euroskilt AS
Reservatveien 8
3118 Tønsberg



service@euroskilt.no

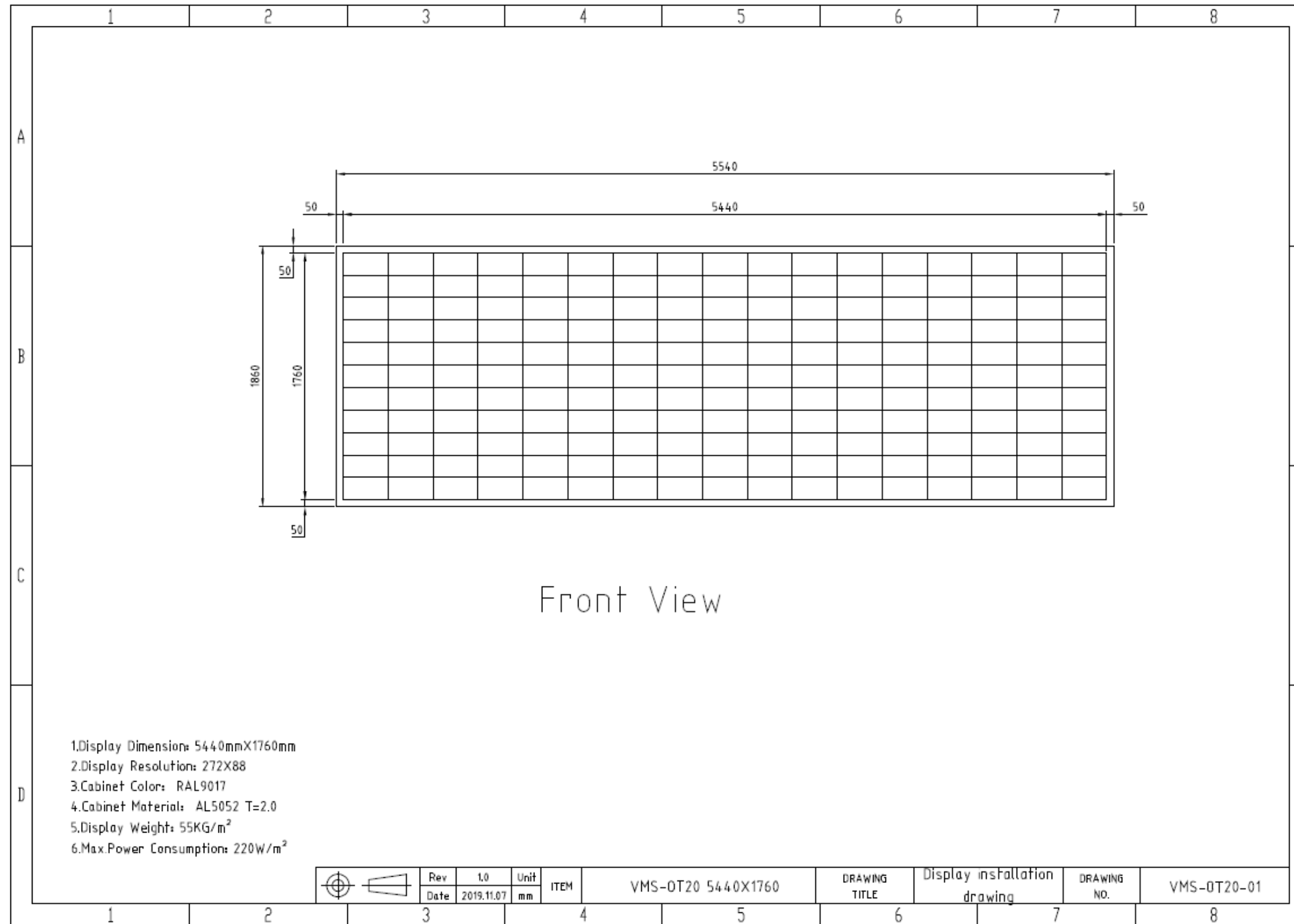
0 60 80

Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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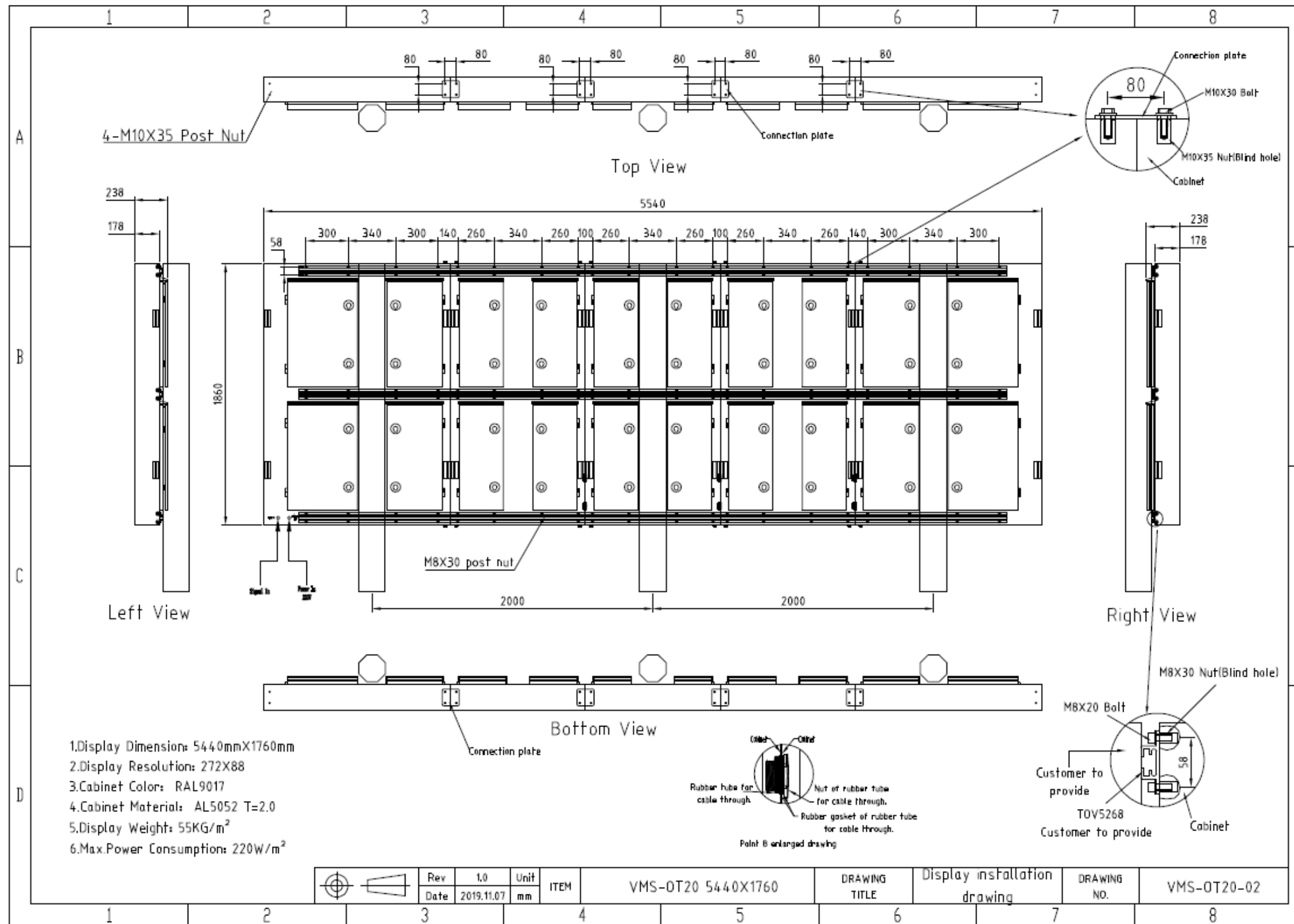
8 VEDLEGG

8.1 TEGNINGER / SKJEMATIKK

8.1.1 Tegning modulsilt V22, V23, V100

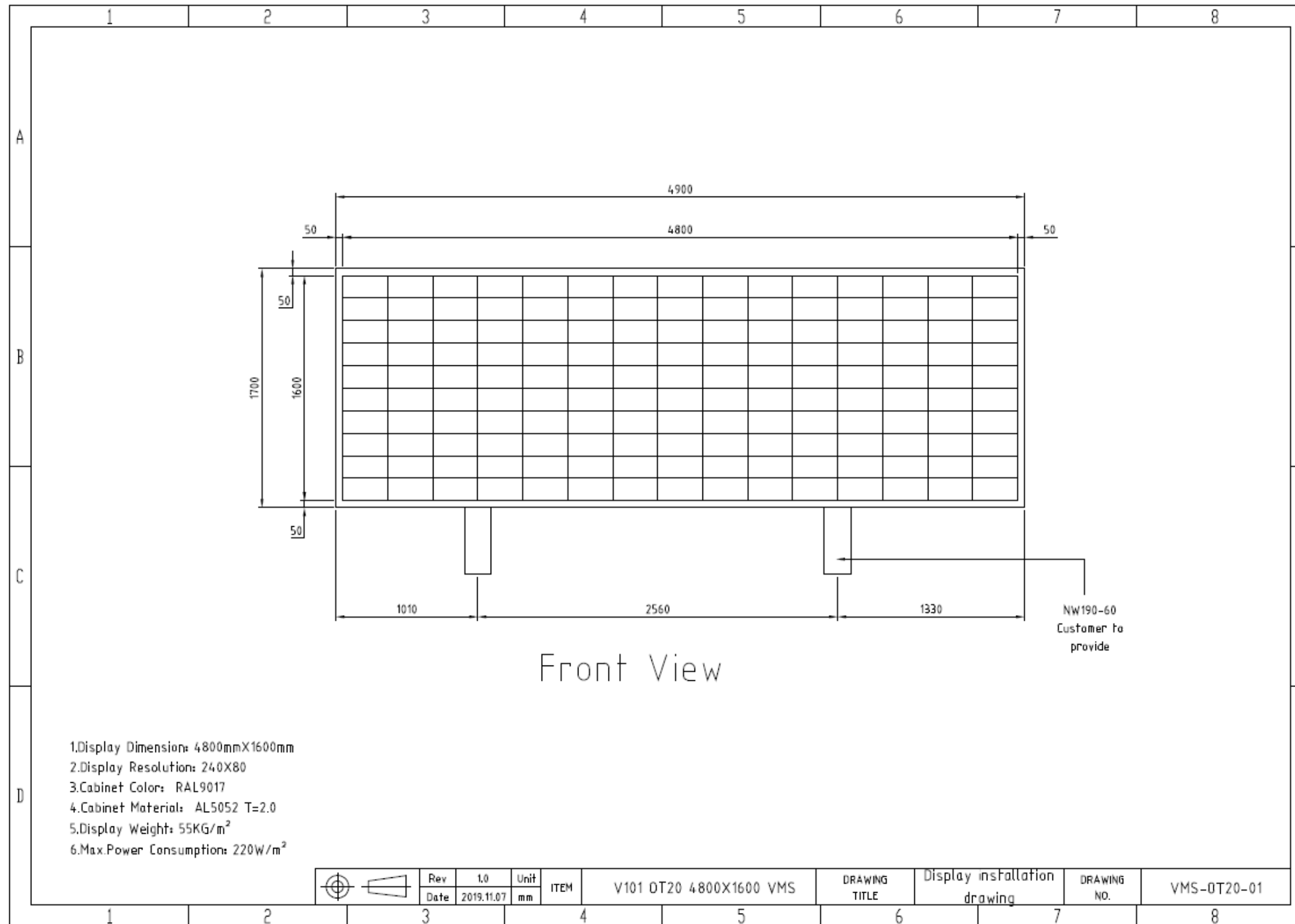


Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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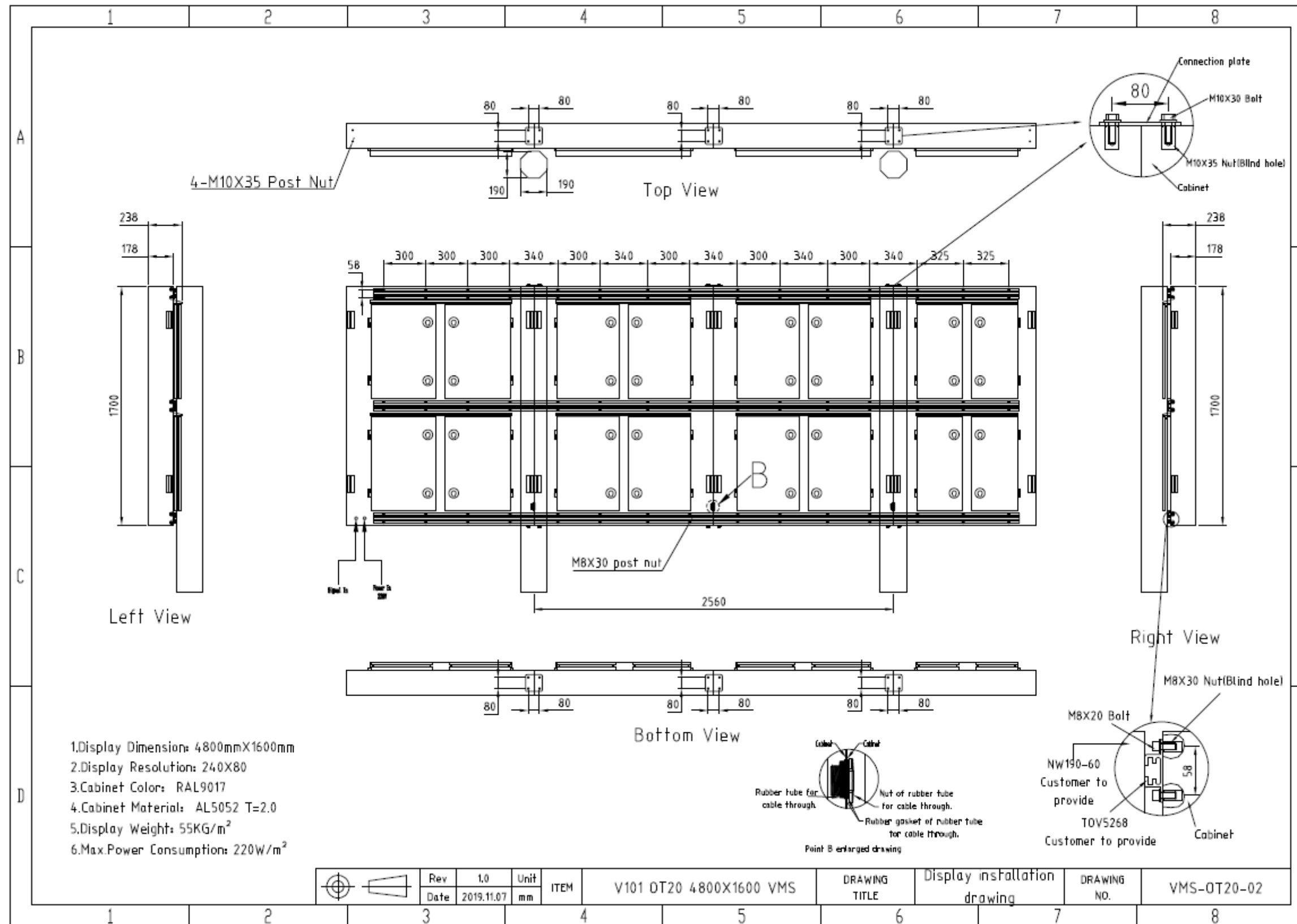


Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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8.1.2 Tegning modulsilt V32

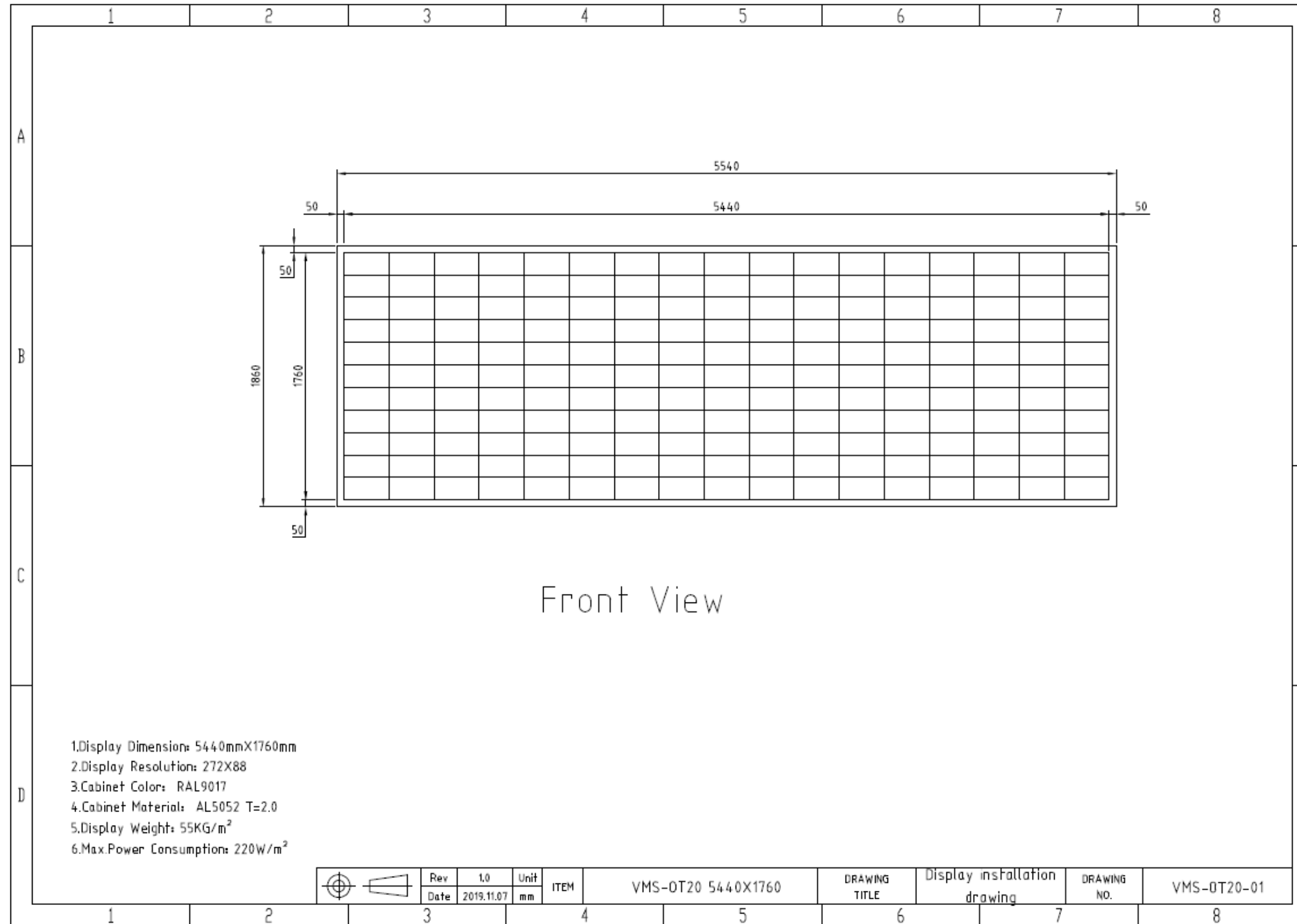


Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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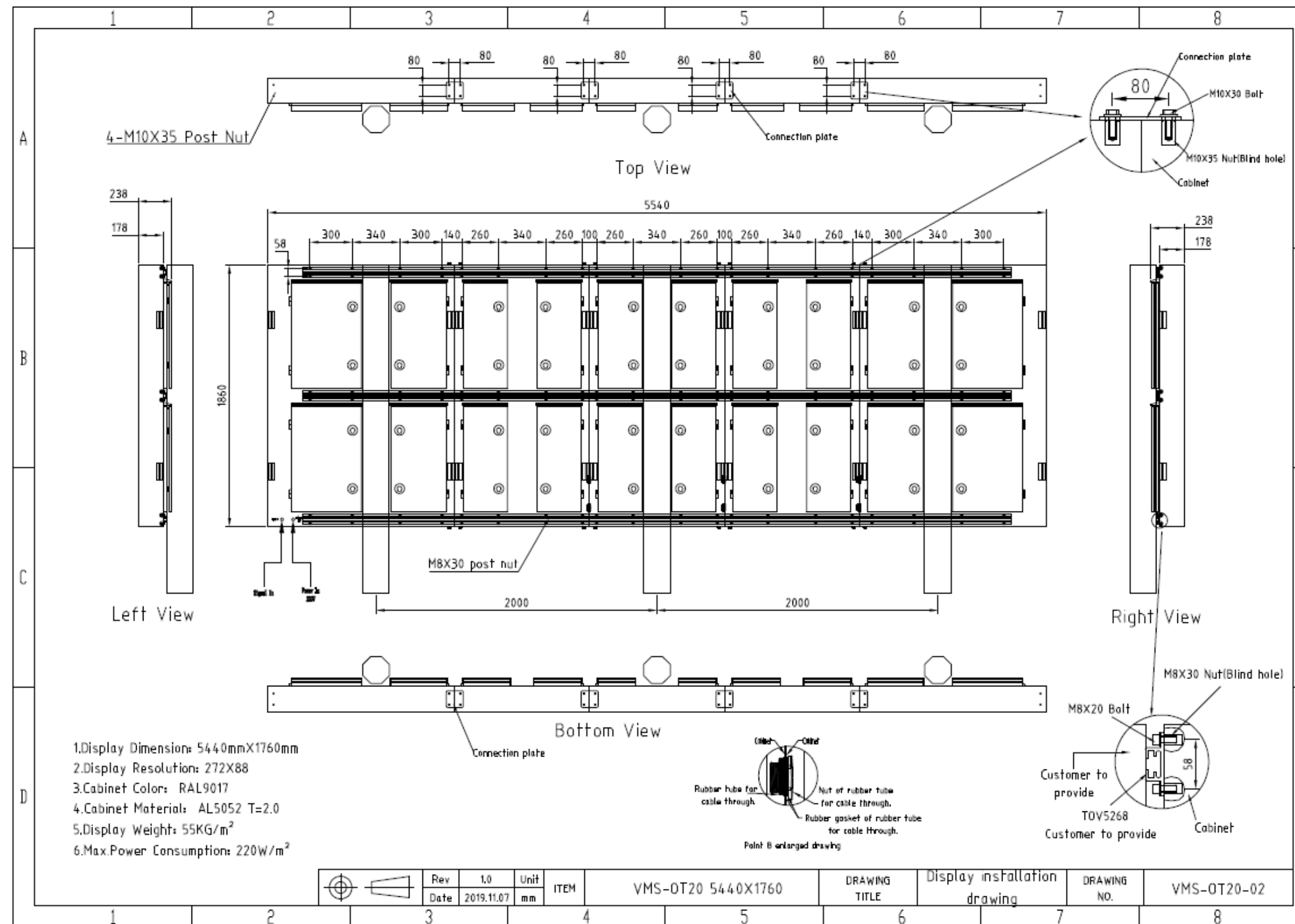


Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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8.1.3 Tegning modulsilt V33

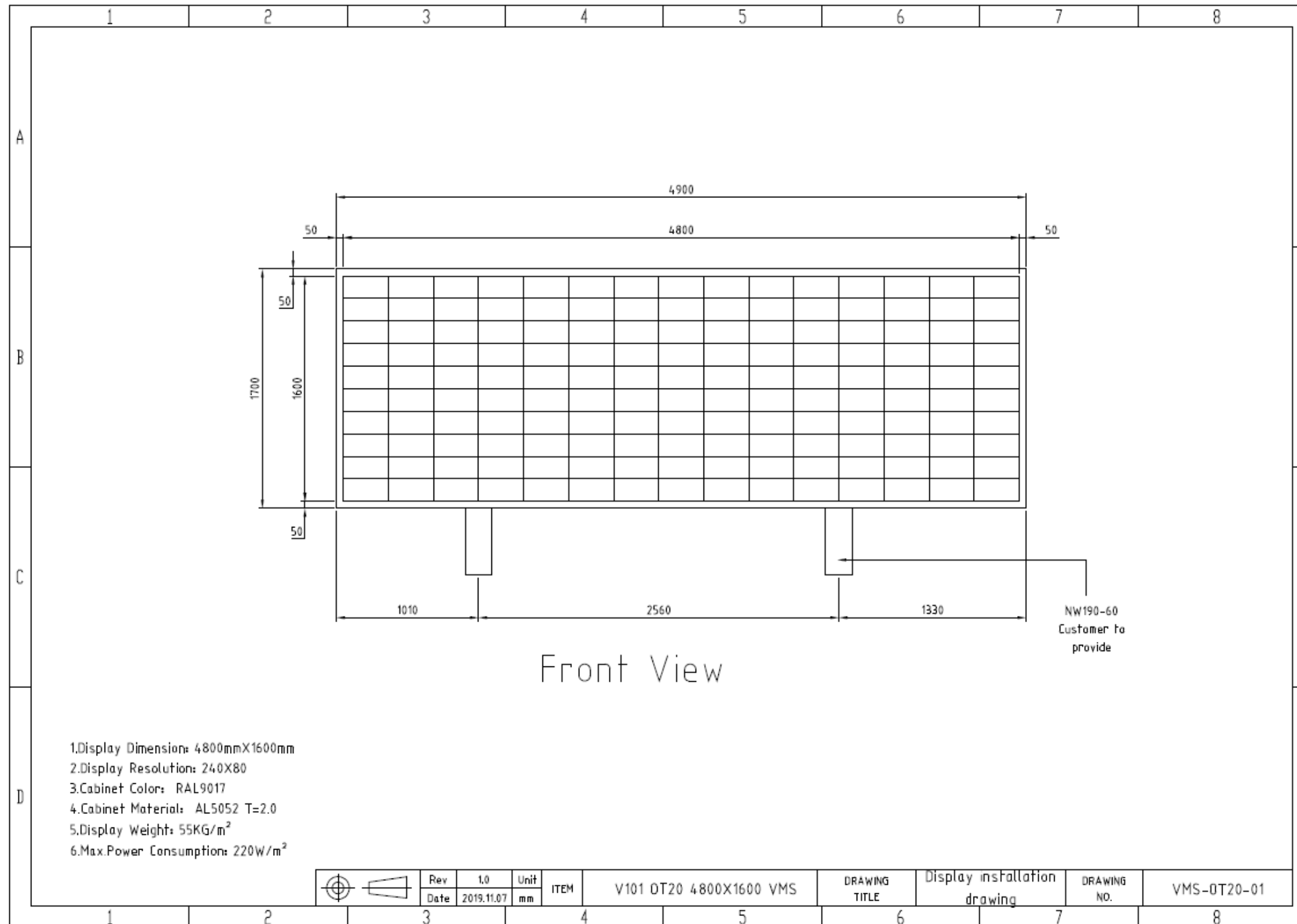


Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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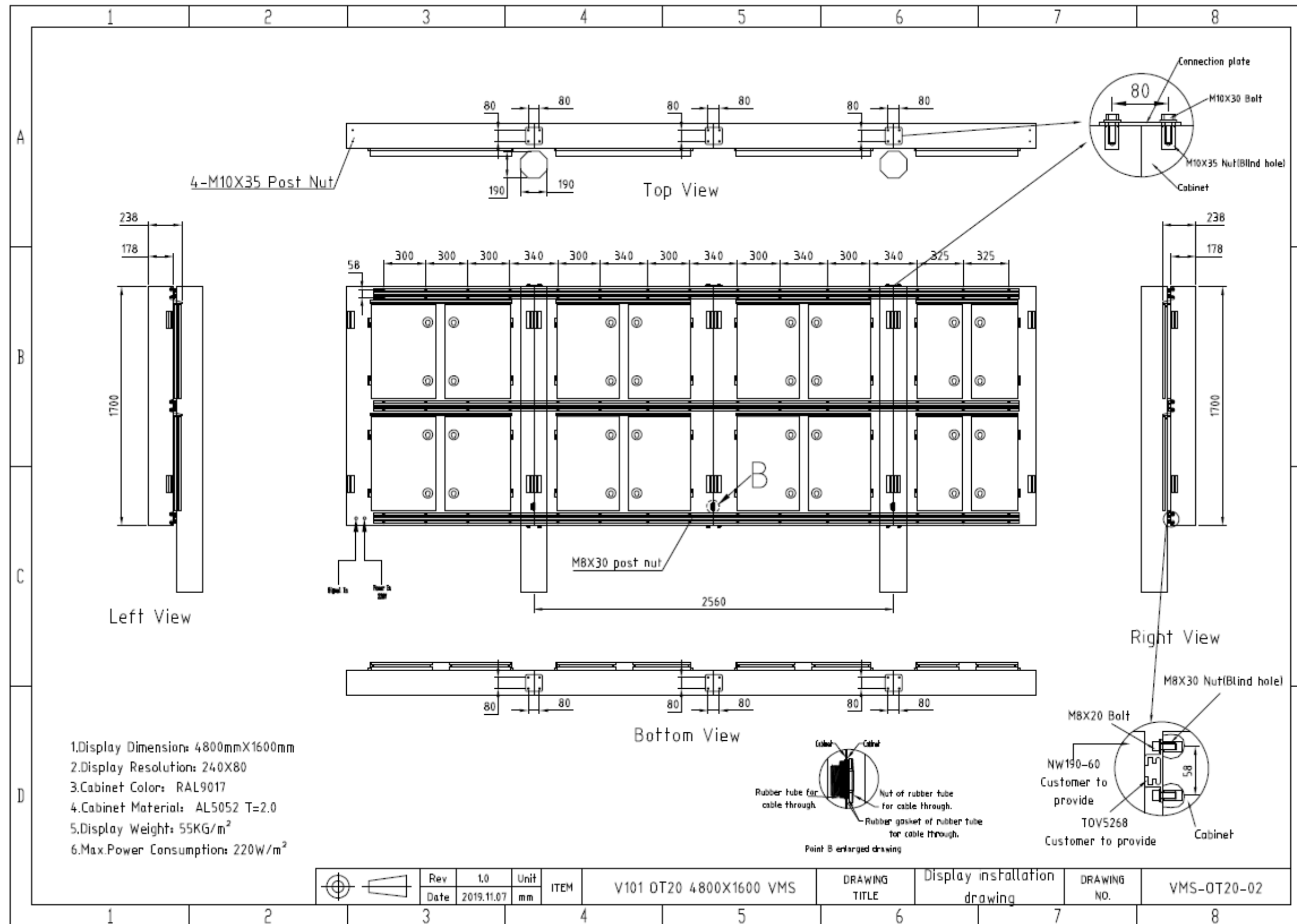


Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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8.1.4 Tegning modulsilt V101



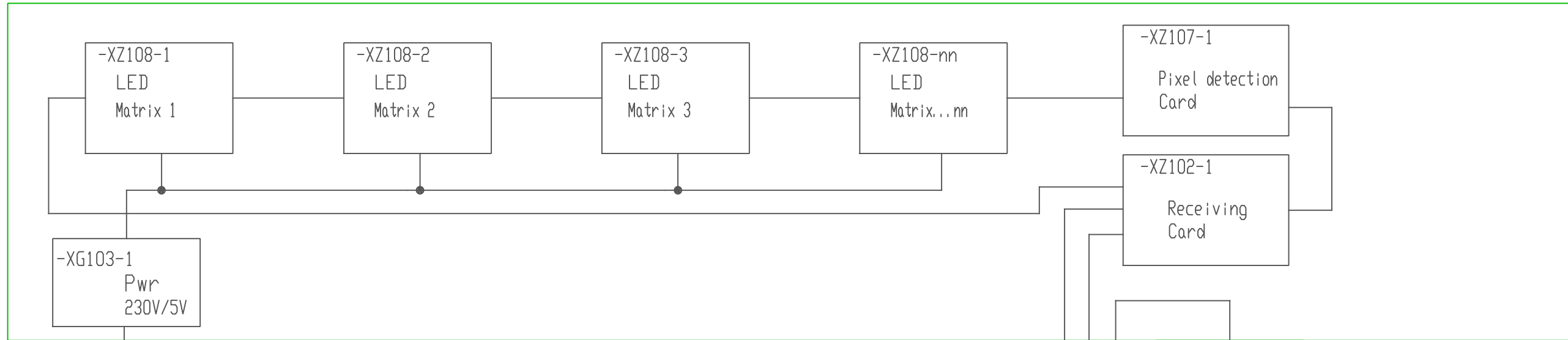
Prosjekt:	Rv3 Rv25 Ommangsvollen m.fl	Prosjektnr:	100584	Dato:	08.11.2019	Rev.	01
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Geometry from 3D CAD-models is leading unless otherwise stated on the 2D drawing or in the additional specifications document

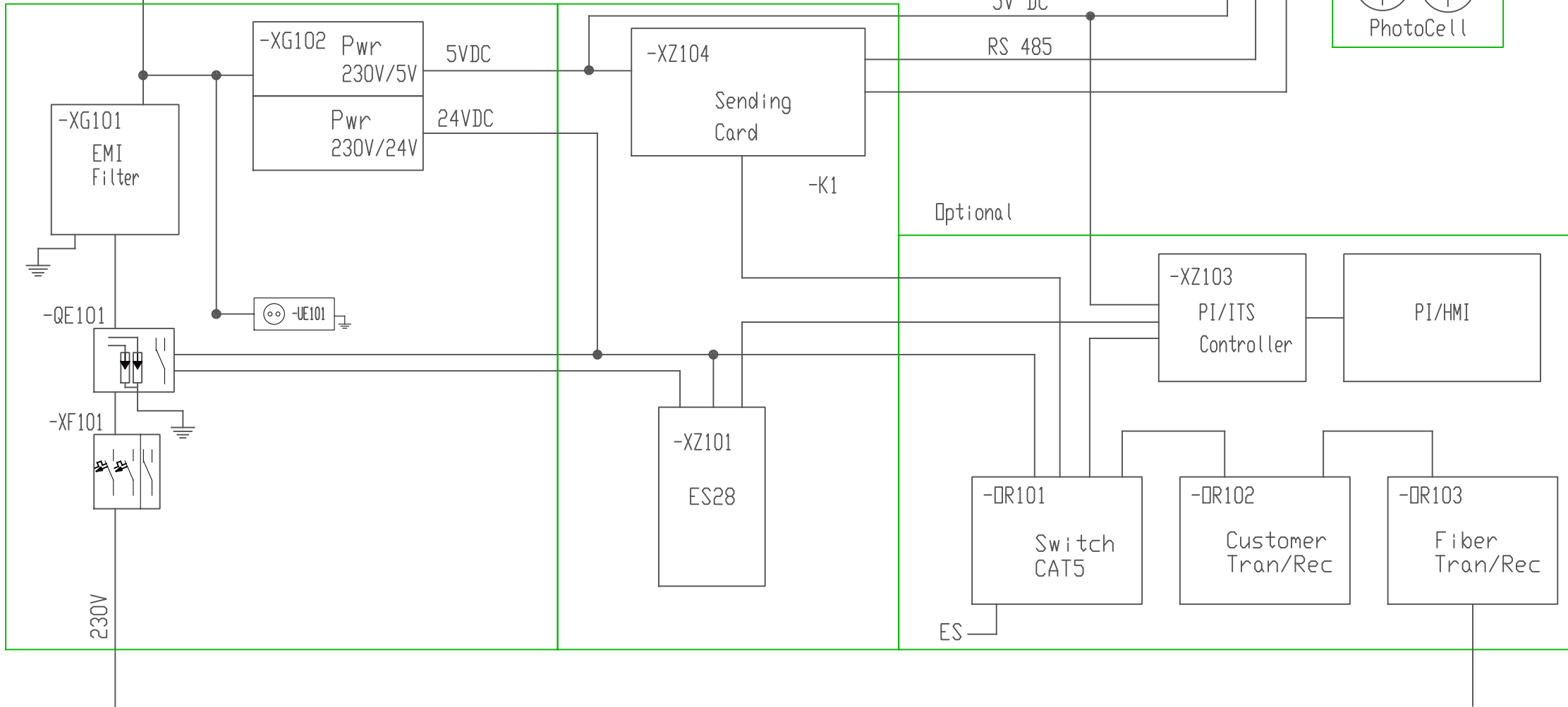
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Sign - LED Matrix Row x n



Power Cabinet

Cabinet



Drawn date	Drawn by	Approval date	Approved by			Sheet	Scale		
08. 11. 19	RW-K	08. 11. 19	FW			1			
Material			Surface treatment				Prod. groupe	Format	
LED Electronic							073	A3	
Title						Status		Drawing no.	
Block Diagram						Preliminary		1	
Additional description						Article no.		Project no.	
LED VMS RGB Modul								100584	
								Revision	
								1	
								Document type	
								RGB	