III IAYA CM	DATA TEKNIS PROYEK	Nomor	:
<u> jrtirt ein</u>		Halaman	:
BIRO ENGINEERING		Tanggal	:

NAM	A PROYEK :		PENGEMBANGAN BANDAR	RA SULTAN HASANUDDIN MAI	CASSAR						
PEMI	LIK :		ANGKASA PURA 1								
JENIS	S PROYEK :		AIRPORT								
LOKA	ASI :	MAKASSAR									
PERI	ODE PELAKSANAAN :										
NO	DESKRIPSI	TERMINAL UTAMA				KETERANGAN					

4		E	LEKTRIKAL		
	DATA DAYA UTAMA		KAPASITAS	SATUAN	KETERANGAN
	Besaran Daya Total	:	3644,135	KVA	
	Listrik Total untuk Penerangan	:	285,854	KVA	
	Listrik Total untuk Stop Kontak		519,38	KVA	
	Listrik Total untuk Daya :				
	- AHU	:	1196,25	KVA	
	- Lift	:	206,25	KVA	
	- Escalator	:	82,5	KVA	
	- Moving Walk	:	18,75	KVA	
	- Total	:	2.308,984	KVA	

DATA KEBUTUHAN DAYA							
Lighting / Penerangan		MERK	TYPE	JUMLAH	JUMLAH DAYA	SATUAN	KETERANGAN
							Bila lebih dari 1 type rinci masing-masing type dan jumlahnya
Type & Merk Lampu Toilet	:	Panasonic	DOWN LIGHT LED 1100LM, 6000 K, 40,60 DEGREE MAX 12 W	229	2748	W	
		Panasonic	DOWN LIGHT LED MR16, 4000 K, 24-30 DEGREE, 7 W	329	2303	W	
		Panasonic	DOWN LIGHT LED 2000LM, 6000 K, 40,60 DEGREE MAX 22 W	400	8800	W	
		Prisled	LED,- , 3000 K, IP20, 14 W	1361	5988,4	W	
Type & Merk Lampu Terminal	:	Panasonic	LED Panel Recessed 300 x 1200 40W 3200lm 6500K	513	20520	W	
		Panasonic	DOWN LIGHT LED COB, 45 DEG, 3500 K, IP20, 3 x 59	322	56994	W	
		Panasonic	DOWN LIGHT LED COB, 45 DEG, 3500 K, IP 20, 59 W	70	4130	W	
		Panasonic	Adj Glareless Down Light, 9.0W 490lm 3000K Ø75 24deg Dimmable	248	2232	W	
		Prisled	TPL Series Linear Light, LED, 3000 K, IP20, 4 W	1361	1088,8	W	
		Prisled	120 DEG, 5000 K, IP20, 24 W	57	1368	W	
		Prisled	LED - Wall Light 3000 K, IP20, 10 W	128	1280	W	
		Prisled	LED-4000K, IP60, 16.3 WATT	39	624	W	
		Prisled	LED COB, 170 DEG x 170 DEG, 3000 K, IP20, 14 W	128	1792	W	
		Prisled	LED COB, 60 DEG, 4000K, IP65, 60W	42	2520	W	
		Prisled	LED COB 5 DEG, 3000 K, IP66, 30 W	40	1200	W	

NO	DESKRIPSI			TERMINA	L UTAMA					KETERANGAN
	Type & Merk Lampu R.Panel, R.AHU, & R.BHS		:	Panasonic	SURFACE MOUNTED	LED 1 x 19 W, 1650LM, IP65	258	4902	W	
				Panasonic	Surface Mounted LED 2	2 x 19 W, 1650LM, IP65	822	31236	W	
	Type & Merk Lampu Koridor Lantai 1			Panasonic	Downlight E Series 19V	V 1900lm 4000K	2013	38247	W	
	Type & Merk Lampu Kolom			Prisled	Rubber Neon Flex LED	9 W	6000	10800	W	
	Type & Merk Lampu Exit			Panasonic	LED Exit Light Hanging	3W, 3Hr	88	264	W	
	quipment Utama									
	Type & Merk Trafo			Bambang Djaya	Dry Type DYN5		2	3150	KVA	
	Type & Merk Panel Tegangan Rendah			LS (Powerwell)	Form 3B untuk LVMDP		1			
	Type & Merk Panel Tegangan Menegah			LS	Metal Enclosed/Air Insu	lated Switchgear	2			
	Type & Merk Kabel		:	Kabel Metal	NYY, NYM, NYFGbY,N	YA, N2SXY,N2SEFGbY				
	Type & Merk BUS Duct			LS	l Series, Tembaga, Isol	asi Epoxy, IP54				
	Type & Merk Amature (Stop kontak /dll)	UNIT Total		Boss						
	Type & Merk Amature (Stop Kontak /dir)	Tipe 1		Boss	Stop Kontak 200 watt		2077	415,4	KW	
	Type & Merk CB			LS						

+	quipment Utama	·							
PU			MERK TYPE JUMLAH SATUAN					Bila lebih dari 1 type rinci masing-masing t	
	JBLIC ADRESS SYSTEM							dan jumlahnya	
		Tipe 1	:	BOSCH	PRS-1P500	3	UNIT		
Da	ower Amplifier	Tipe 2		BOSCH	PRS-2P250	5	UNIT		
FU	wer Ampimer	Tipe 3		BOSCH	PRS-4P125	3	UNIT		
		Tipe 4		BOSCH	LBB4428/00	1	UNIT		
		Ceiling		BOSCH	LBC-3087/41	906	TITIK		
Sp	peaker	Wall Speaker		BOSCH	LBC-3011/41	75	TITIK		
		Box	:	BOSCH	LB2-UC15-D1	79	TITIK		
Ra	ack Power Amplifier			ABBA Rack	NC30-10900-GG/GB	1	UNIT		
					NC20-10900-GG/GB	1	UNIT		
IΡ	PHONE			UNIFY	Openstage Desk Phone CP200	158	Unit		
KA	ABEL			Kabel Metal					
Ja	ringan Data								
٥.,	vitch	Access Switch		CISCO	Catalyst C9300-24P	22	Unit		
SW	vitcii	Distribution Switch	:	CISCO	Catalyst C9500-40X	2	Unit		
Б-	ack Server			GSPE	Close Rack 42U	8	Unit		
ка	ack Server		:	GSPE	Wallmount Rack 15U	16	Unit		
.,				Commscope	F/UTP Cat 6a				
ĸa	bel		:	Belden	FO				

NO	DESKRIPSI			TERMINA	AL UTAMA						KETERANGAN
	FIRE ALARM								•		
	Smoke/Heat Detector	UNIT Total									
	Silloker leat Detector	Unit Tipe 1		Notifier	Photoelectric Smoke Detector Addressable Photoelectric Smoke	541	TITIK				
		Unit Tipe 2		Notifier	Photoelectric Smoke Detector Non Fixed Temperature	511	TITIK				
		Unit Tipe 3		Notifier	Heat Detektor Non Beam Detektor Non	4	TITIK				
		Unit Tipe 4		Notifier	Beam Detektor Non Addresable	34	TITIK				
	Type & Merk Bell		:	Notifier		98	UNIT				
	Panel Utama Alarm		:	Notifier		1	UNIT				
		Tipe 1 Detektor Non Tipe 2		Kabel Metal	NYA						
	Kabel	Detektor Tipe 3	:	Datwyler	STP AWG 18						
	Table.	Kabel Power Tipe 4		Nexans	FRC						
		Tipe 4 Kabel Data	:	Betaflam	FRC AWG 18						
	ссти	T			1						
	CCTV	Dome Camera		Sony	SNC-XM631	151	TITIK				
		PTZ Camera	:	Sony	SNC-WR630	16	TITIK				
	KABEL			Commscope	F/UTP Cat 6a						
	FIDS	ı			1						
		FIDS		Inalix							
		Server		Dell	R440	1	Unit				
	FIDS	Monitor									
			13	LG	SM5KE	102	Unit				
			55	LG	SM5KE	6	Unit				
		6	35 :	LG	SM5KE	23	Unit				
	KABEL			Commscope	F/UTP Cat 6a						
							-		ļ		
	Building Automatic System				1	. т					
	BAS			Honeywell		4.459	POINT			j	

6	PLUMBING										
	EQUIPMENT UTAMA			MERK	TYPE	JUMLAH	KAPASITAS	SATUAN	DAYA	SATUAN	KETERANGAN
		AB	:	ATP Toro	PPR PN10						
		AK	:	Vinilon	UPVC type AW						
	PIPA	ABK	:	Vinilon	UPVC tipe AW						
		AH	:	Fast Flow	UPVC						
		RISER AB	:	ATP Toro	PPR PN 10						
		R. POMPA AB		Kitz	JIS 10K						
	VALVE PRV										Tidak ada PRV
	PRV										Tidak ada PRV

NO	DESKRIPSI			TERMINA	L UTAMA					KETERA	NGAN
6	FIRE FIGHTING										
	EQUIPMENT UTAMA			MERK	TYPE	JUMLAH	KAPASITAS (GPM)	DAYA (KW)	KETERANGAN		1
	Springkler		:	Тусо	Pendant (68°C)	2.852					1
					Upright (68°C)	5.332					
	BOX HIDRANT			Citi Fire	Indoor Hydrant Box	105					
	PIPA	FF RISER		SPINDO	Black Steel Sch 40 ASTM A53 Grade A						1
		FF SETELAH PRV		SPINDO	Black Steel Sch 40 ASTM A53 Grade A						
		R. POMPA		Kitz	Gate Valve 20K						1
	VALVE	INSTALASI		Kitz	Gate Valve 16K]
	Automatic Air Release Valve			Yoshitake	Cast Iron Automatic Air Vent	24		Unit			
	BCV			Vitaulic	Series 751 Firelock	22		Unit			
	PRV			Socia	CL101	2		Unit			
				MERK	TYPE	JUMLAH					
				Citifire	3,8kg Dry Chemical	396					
	Fire Extingusher			Citifire	5kg Cleant Agent	21					_
			:	Citifire	25kg Clean Agent	8					_

7 VENTILATION & AIR CONDITION			MERK	TYPE	JUMLAH	KAPASITAS	SATUAN	DAYA	SATUAN	KETERANGAN
AHU/ FCU		:	Daikin		123	3622	TR		KW	
Exshaust Fan	Toilet Type 1.1	:	System Air	Cabinet In Line	1	3750	CFM	3	KW	
Exsuaust Fam	Toilet Type 1.2	:	System Air	Cabinet In Line	1	3750	CFM	3	KW	
	Toilet Type 1.3		System Air	Cabinet In Line	1	3400	CFM	3	KW	
	Toilet Type 1.4		System Air	Cabinet In Line	1	2150	CFM	0,664	KW	
	Toilet Type 1.5		System Air	Cabinet In Line	1	1600	CFM	0,483	KW	
	Toilet Type 1.6		System Air	Cabinet In Line	1	1600	CFM	0,483	KW	
	Toilet Type 1.7		System Air	Cabinet In Line	1	2150	CFM	0,664	KW	
	Toilet Type 2.1		System Air	Cabinet In Line	1	4750	CFM	3	KW	
	Toilet Type 2.2		System Air	Cabinet In Line	1	1200	CFM	0,483	KW	
	Toilet Type 2.3		System Air	Cabinet In Line	1	4750	CFM	3	KW	
	Toilet Type 2.4		System Air	Cabinet In Line	1	1050	CFM	0,483	KW	
	Toilet Type 2.5		System Air	Cabinet In Line	1	1400	CFM	0,483	KW	
	Toilet Type 2.6		System Air	Cabinet In Line	1	1400	CFM	0,483	KW	
	Toilet Type 3.1		System Air	Cabinet In Line	1	1750	CFM	0,483	KW	
	Toilet Type 3.2		System Air	Cabinet In Line	1	2200	CFM	0,664	KW	
	Toilet Type 3.3		System Air	Cabinet In Line	1	1750	CFM	0,483	KW	
	Toilet Type 3.4		System Air	Cabinet In Line	1	2200	CFM	0,664	KW	
	OLDAYC		SPINDO	sampai dengan dia. 200 mm Blacksteel Sch 40						
PIPA _	CHWS			dia. 250 keatas Pipa						
	CHWR		SPINDO	Standar SNI 0039 : sampai dengan dia. 200 mm Blacksteel Sch 40 dia. 250 keatas Pipa						
				Standar SNI 0039 :						

NO	DESKR	(RIPSI		TERMINAL UTAMA				VADARITAR I VEGENATAN			KETERANGAN
8	8 ELEVATOR & ESCALATOR			MERK	TYPE	JUMLAH	KAPASITAS (KG)	(PERSON)	KECEPATAN (MPM)	DAYA (KW)	KETERANGAN
	Passanger Elevator		:	Thyssenkrupp	Machine Roomless	4	-	14	60	15	Bila lebih dari 1 type rinci masing-masing type dan jumlahnya
	Service Elevator			Thyssenkrupp	Machine Roomless	5	2000	-	60	21	
	Escalator		:	Thyssenkrupp	Velino	6	-	9000/hr	50	11	
	Kemiringan Escalator	30 °	:	=		-	-	-	=	-	
	Ketinggian Escalator	4900 mm	:	=			-	-	-	-	
	Moving Walk		:	Thyssenkrupp	orinoco	2		-	50	7,5	
	Kemiringan Moving Walk 0 °		:	=	=	-	-	-	=	-	
	anjang Moving Walk 45 m		:	-	-	1	-	-	-	-	
		,g						•			

BAGGAGE HANDLING	SYSTEM		MERK	TYPE	JUMLAH	KAPASITAS (KVA)	Keterangan
BHS		:	Dimark			800	
	Level Of Security			5			
	Kapasitas	:			6000 bag/jam		
	Check In				96 Counter		
	Spiral Chute				1		
	Lift OOG				1		
	Make Up				24 Chute		
					2 Carousel		
	Baggage Claim						
	International			tipe L	1		
				Tipe T	1		
				Tipe I	1		
	Domestik			tipe L	6		
				Tipe T	2		
				Tipe I	1		
	CCTV		Bosch	Flexidome	38		
	Baggage Information Display System		Inalix				
	Monitor		LG	43SM5SKE	22		

Bila lebih dari 1 type rinci masing-masing type dan jumlahnya

IN IAYA CM	DATA TEKNIS PROYEK	Nomor :			
<u> </u>		Halaman :			
BIRO ENGINEERING		Tanggal :			
NAMA PROYEK	PENGEMBANGAN BANDARA SULTAN HASANUDDIN MAKASSAI	R			
PEMILIK	: ANGKASA PURA 1				
JENIS PROYEK	AIRPORT				
LOKASI	MAKASSAR				
PERIODE PELAKSANAAN					

KETERANGAN

4		I	ELEKTRIKAL		
	DATA DAYA UTAMA		KAPASITAS	SATUAN	KETERANGAN
	Besaran Daya Total	:	1639,515	KVA	
	Listrik Total untuk Penerangan	:	84,000	KVA	
	Listrik Total untuk Stop Kontak		156	KVA	
	Listrik Total untuk Daya :				
	- AHU	:	262,75	KVA	
	- Lift	:	90	KVA	
	- Escalator	:	55	KVA	
	- Moving Walk	:	50	KVA	
	- Total	:	697,750	KVA	

TERMINAL SELATAN

NO

DESKRIPSI

DATA KEBUTUHAN DAYA							
Lighting / Penerangan		MERK	ТҮРЕ	JUMLAH	JUMLAH DAYA	SATUAN	KETERANGAN
							Bila lebih dari 1 type rinci masing-masing type dan jumlahnya
Type & Merk Lampu Toilet	:	Panasonic	DOWN LIGHT LED 1100LM, 6000 K, 40,60 DEGREE MAX 12 W	84	1008	W	
		Panasonic	DOWN LIGHT LED MR16, 4000 K, 24-30 DEGREE, 7 W	194	1358	W	
		Panasonic	DOWN LIGHT LED 2000LM, 6000 K, 40,60 DEGREE MAX 22 W	43	946	W	
		Prisled	LED,- , 3000 K, IP20, 14 W	298	1311,2	W	
Type & Merk Lampu Terminal	:	Panasonic	LED Panel Recessed 300 x 1200 40W 3200lm 6500K	176	7040	W	
		Panasonic	DOWN LIGHT LED COB, 45 DEG, 3500 K, IP 20, 59 W	16	944	W	
		Panasonic	DOWN LIGHT LED COB, 35 DEG,3500 K, IP66, 15 W	339	5085	W	
		Prisled	120 DEG, 5000 K, IP20, 24 W	538	12912	W	
Type & Merk Lampu R.Panel, R.AHU, & R.BHS	:	Panasonic	SURFACE MOUNTED LED 1 x 19 W, 1650LM, IP65	18	342	W	
		Panasonic	Surface Mounted LED 2 x 19 W, 1650LM, IP65	446	16948	W	
Type & Merk Lampu Koridor Lantai 1	:	Panasonic	Downlight E Series 19W 1900lm 4000K	387	7353	W	
Type & Merk Lampu Exit	:	Panasonic	LED Exit Light Hanging 3W, 3Hr	7	21	W	

NO	DESKRIPSI			TERMINAL	. SELATAN					KETERANGAN
	Equipment Utama									
	Type & Merk Trafo		:	Bambang Djaya	Dry Type DYN5		2	1600	KVA	
	Type & Merk Panel Tegangan Rendah		:	LS (Powerwell)	Form 3B untuk LVMDF		1			
	Type & Merk Panel Tegangan Menegah			LS	Metal Enclosed/Air Ins	ulated Switchgear	2			
	Type & Merk Kabel		:	Kabel Metal	NYY, NYM, NYFGbY,N	NYA, N2SXY,N2SEFGbY				
	Type & Merk BUS Duct			LS	l Series, Tembaga, Iso	lasi Epoxy, IP54				
	Type & Merk Amature (Stop kontak /dll)	UNIT Total		Boss						
	Type & Werk Amature (Otop Kontak /uli)	Tipe 1		Boss	Stop Kontak 200 watt		624	124,8	KW	
	Type & Merk CB			LS						

SOUND SYSTEM, TELEPON Equipment Utama	I, FA, CCTV, BAS		MERK	TYPE	JUMLAH	SATUAN	KETERANGAN Bila lebih dari 1 type rinci masing-masir
PUBLIC ADRESS SYSTEM			WERK	TTPE	JUMLAH	SATUAN	type dan jumlahnya
							3,10 ,
Power Amplifier	Tipe 1		BOSCH	PRS-2P250	2	UNIT	
Fower Ampliner	Tipe 2		BOSCH	PRS-4P125	1	UNIT	
	Ceiling		BOSCH	LBC-3087/41	130	TITIK	
0	Wall Speaker		BOSCH	LBC-3011/41	8	TITIK	
Speaker	Horn Speaker		BOSCH	LBC-3473/00	8	TITIK	
	Вох	:	BOSCH	LB2-UC15-D1	30	TITIK	
Rack Power Amplifier		:	ABBA Rack	AR-W15-600-DB	1	UNIT	
IP PHONE			UNIFY	Openstage Desk Phone CP200	32	Unit	
KABEL			Kabel Metal				
Į.	L .			<u>l</u>	1		
Jaringan Data				1			
Switch	Access Switch		CISCO	Catalyst C9300-24P	12	Unit	
	Distribution Switch	:	-	-	-	Unit	
			GSPE	Close Rack 42U	1	Unit	
Rack Server		:	GSPE	Wallmount Rack 15U	5	Unit	
			Commscope	F/UTP Cat 6a			
Kabel		:	Belden	FO			
I							

NO	DESKRIPSI			TERMINAL	SELATAN					KETERANGAN
	FIRE ALARM							•		
		UNIT Total								
	Smoke/Heat Detector	Unit Tipe 1	:	Notifier	Photoelectric Smoke Detector Addressable	110	TITIK			
		Unit Tipe 2		Notifier	Photoelectric Smoke Detector Non Addressable	111	TITIK			
		Unit Tipe 3		Notifier	Beam Detektor Non Addresable	18	TITIK			
	Type & Merk Bell		:	Notifier		18	UNIT			
	Panel Utama Alarm		:	Notifier		1	UNIT			
		Tipe 1 Detektor Non Addressable		Kabel Metal	NYA					
	Kabel	Tipe 2 Detektor Addressable	:	Datwyler	STP AWG 18				-	
	Rabei	Tipe 3 Kabel Power		Nexans	FRC				_	
		Tipe 4 Kabel Data	:	Betaflam	FRC AWG 18					
						•]	
	CCTV	Γ	1 1			1			4	
	CCTV	Dome Camera		Sony	SNC-XM631	39	TITIK			
	0017	PTZ Camera	:	Sony	SNC-WR630	21	TITIK			
	KABEL			Commscope	F/UTP Cat 6a					
	FIDS					L.			1	
		FIDS		Inalix						
		Server		Dell	R440	1	Unit		1	
	FIDS	Monitor							1	
	ILINO	43	3	LG	SM5KE	12	Unit			
		55	5	LG	SM5KE	10	Unit			
		65	5 :	LG	SM5KE	7	Unit			
	KABEL			Commscope	F/UTP Cat 6a					
	Building Automotic System									
	Building Automatic System BAS			Honeywell		670	POINT		1	
	I=			1 ioney wen	<u>l</u>	3701	1 01111		_	

NO	DESKRIPSI			TERMINAL						KETERANGAN	
	PLUMBING										
	EQUIPMENT UTAMA			MERK	TYPE	JUMLAH	KAPASITAS	SATUAN	DAYA	SATUAN	KETERANGAN
		АВ	:	ATP Toro	PPR PN10						
		AK	:	Vinilon	UPVC type AW						
	FIRE FIGHTING	ABK	:	Vinilon	UPVC tipe AW						
		АН	:	Fast Flow	UPVC						
		RISER AB	:	ATP Toro	PPR PN 10						
		R. POMPA AB		Kitz	JIS 10K						
	VALVE	PRV									Tidak ada PRV
	PRV										Tidak ada PRV
		•						•	•	•	<u>-</u>

6	FIRE FIGHTING								
	EQUIPMENT UTAMA			MERK	TYPE	JUMLAH	KAPASITAS (GPM)	DAYA (KW)	KETERANGAN
	Springkler		:	Тусо	Pendant (68°C)	494			
					Upright (68°C)	732			
	BOX HIDRANT			Citi Fire	Indoor Hydrant Box	18			
	PIPA	FF RISER		SPINDO	Black Steel Sch 40 ASTM A53 Grade A				
		FF SETELAH PRV		SPINDO	Black Steel Sch 40 ASTM A53 Grade A				
		R. POMPA		Kitz	Gate Valve 20K				
	VALVE	INSTALASI		Kitz	Gate Valve 16K				
	Automatic Air Release Valve			Yoshitake	Cast Iron Automatic Air Vent	2		Unit	
	BCV			Vitaulic	Series 751 Firelock	2		Unit	
	PRV			Socia	CL101	2		Unit	
				MERK	TYPE	JUMLAH			
				Citifire	3,8kg Dry Chemical	47			
	Fire Extingusher			Citifire	5kg Cleant Agent	9			
			:	Citifire	25kg Clean Agent	2			

AHU/FCU	KETERANGAN
Exshaust Fan	ETERANGAN
Cashaust Fan	
Tollet Type 1.3 System Air Cabinet In Line 1 1850 CFM 0.483 KW	
Toilet Type 1.4 System Air Cabinet in Line 1 1850 CFM 0.483 KW	
Toilet Type 1.5 System Air Cabinet in Line 1 1750 CFM 0.483 KW	
Toilet Type 1.6 System Air Cabinet in Line 1 1550 CFM 0.483 KW	
Toilet Type 1.7 System Air Cabinet In Line 1 1750 CFM 0.483 KW	
Toilet Type 1.8 System Air Cabinet in Line 1 900 CFM 0.483 KW	
Toilet Type 1.9 System Air Cabinet In Line 1 1200 CFM 0.483 KW	
Toilet Type 2.1 System Air Cabinet In Line 1 1850 CFM 0.483 KW	
Toilet Type 2.2 System Air Cabinet In Line 1 1850 CFM 0,483 KW	
Toilet Type 2.3 System Air Cabinet In Line 1 1850 CFM 0,483 KW	
Toilet Type 2.4 System Air Cabinet In Line 1 1850 CFM 0.483 KW	
Toilet Type 2.4 System Air Cabinet In Line 1 1850 CFM 0,483 KW	
Toilet Type 2.5 System Air Cabinet In Line 1 1750 CFM 0,483 KW	
Toilet Type 2.6	-
SPINDO Sampai dengan dia. 200 mm Blacksteel Sch 40 ASTM AS3 Grade A dia. 250 keatas Pipa Standar SNI 0039 : 2013 tebal heavy sampai dengan dia. 200 mm Blacksteel Sch 40 ASTM AS3 Grade A dia. 250 keatas Pipa Standar SNI 0039 : 2013 tebal heavy sampai dengan dia. 200 mm Blacksteel Sch 40 ASTM AS3 Grade A dia. 250 keatas Pipa Standar SNI 0039 : 2013 tebal heavy Standar SNI 0039	-
PIPA Standar SNI 0039 : 2013 tebal heavy Smpal dengan dia. 200 mm Blacksteel Sch 40 ASTM A53 Grade A dia. 250 keatas Pipa Standar SNI 0039 : 2013 tebal heavy Smpal dengan dia. 200 mm Blacksteel Sch 40 ASTM A53 Grade A dia. 250 keatas Pipa Standar SNI 0039 : 2013 tebal heavy Standar SNI 0039 : 2013 tebal heavy Standar SNI 0039 : 2013 tebal heavy DAYA (KW) EXAMPLE OF THE O	
SPINDO SPINDO SPINDO Sempla cengan out SPINDO	
Standar SNI 0039 : 2013 tebal heavy Standar SNI 0039 : 2013 tebal	
BELEVATOR & ESCALATOR MERK TYPE JUMLAH (KG) (PERSON) (MPM) DAYA (KW) I Passanger Elevator : Thyssenkrupp Machine Roomless 2 - 14 60 15 Bila lebih dari Service Elevator Thyssenkrupp Machine Roomless 2 2000 - 60 21	
Service Elevator Thyssenkrupp Machine Roomless 2 2000 - 60 21	ETERANGAN
Service Elevator Thyssenkrupp Machine Roomless 2 2000 - 60 21	1 type rinci masing-masing
Escalator : Thyssenkrupp Velino 4 - 9000/hr 50 11	
Kemiringan Escalator 30 ° :	
Ketinggian Escalator 5000 mm :	
Moving Walk : Thyssenkrupp orinoco 4 - 50 7.5	
Kemiringan Moving Walk 0° :	
Panjang Moving Walk 45 m :	
Moving Walk : Thyssenkrupp orinoco 1 - 50 7,5	
Kemiringan Moving Walk 0° :	
Panjang Moving Walk 20 m :	

□ JAYA CM		DATA TEKNIS PROYEK	Nomor	:
			Halaman	:
BIRO ENGINEERING			Tanggal	:
NAMA PROYEK	:	PENGEMBANGAN BANDARA SULTAN HASANUDDIN MAKASSAR		
PEMILIK	T:	ANGKASA PURA 1		

NAM	APROYEK	:		PENGEMBANGAN BANDAR	A SULTAN HASANUDDIN MAI	KASSAR				
PEMI	ILIK	:		ANGKASA PURA 1						
JENI	S PROYEK				AIRPORT					
LOK	ASI			MAKASSAR						
PERI	IODE PELAKSANAAN	:								
NO	DESKRIPSI		GEDUNG PARKIR				KETERANGAN			

4		E	LEKTRIKAL		
	DATA DAYA UTAMA		KAPASITAS	SATUAN	KETERANGAN
	Besaran Daya Total	:	1206	KVA	
	Listrik Total untuk Penerangan	:	37,650	KVA	
	Listrik Total untuk Stop Kontak		18,6	KVA	
	Listrik Total untuk Daya :				
	- AC	:	36,36	KVA	
	- Lift	:	46	KVA	
	- Total	:	138,610	KVA	

DATA KEBUTUHAN DAYA							
Lighting / Penerangan		MERK	ТҮРЕ	JUMLAH	JUMLAH DAYA	SATUAN	KETERANGAN
							Bila lebih dari 1 type rinci masing-masing type dan jumlahnya
Type & Merk Lampu Toilet	:	Panasonic	DOWN LIGHT LED 1100LM, 6000 K, 40,60 DEGREE MAX 12 W	84	1008	W	
Type & Merk Lampu Drive Way	:	Panasonic	TL BATTEN LED 2 x 19 W, 4000 K	611	23218	W	
Type & Merk Lampu Parking		Panasonic	TL BATTEN LED 1 x 19 W, 4000 K	634	12046	W	
Type Lampu Garden		Prisled	WALL LAMP LED 15 W	38	570	W	
		Prisled	BOLLARD LED 41 W	15	615	W	
Type & Merk Lampu R.Panel, R.AHU, & R.BHS	:	Panasonic	SURFACE MOUNTED LED 1 x 19 W, 1650LM, IP65	8	152	W	
Type & Merk Lampu Exit	:	Panasonic	LED Exit Light Hanging 3W, 3Hr	12	36	W	

NO	DESKRIPSI			GEDUNG	PARKIR						KETERANGAN
	Equipment Utama										
	Type & Merk Trafo			Bambang Djaya	Dry Type DYN5		2	1250	KVA		
	Type & Merk Panel Tegangan Rendah		:	LS (Powerwell)	Form 3B untuk LVMDP		1				
	Type & Merk Panel Tegangan Menegah			LS	Metal Enclosed/Air Insu	lated Switchgear	2				
	Type & Merk Kabel		:	Kabel Metal	NYY, NYM, NYFGbY,NYA, N2SXY,N2SEFGbY						
	Type & Merk BUS Duct		:	LS	l Series, Tembaga, Isola	asi Epoxy, IP54					
	Type & Merk Amature (Stop kontak /dll)	UNIT Total		Boss							
	Type & Merk Amature (Otop Kontak 7dii)	Tipe 1		Boss	Stop Kontak 200 watt		93	18,6	KW		
	Type & Merk CB			LS							

SOUND SYSTEM, TELEP	ON, FA, CCTV, BAS						KETERANGAN
Equipment Utama			MERK	TYPE	JUMLAH	SATUAN	Bila lebih dari 1 type rinci masing-masing
PUBLIC ADRESS SYSTEM							type dan jumlahnya
Power Amplifier	Tipe 1		BOSCH	PRS-1P500	1	UNIT	
	Ceiling		BOSCH	LBC-3087/41	21	TITIK	
Speaker	Wall Speaker		BOSCH	LBC-3011/41	14	TITIK	
	Horn Speaker		BOSCH	LBC-3473/00	76	TITIK	
Rack Power Amplifier		:	ABBA Rack	AR-W15-600-DB	1	UNIT	
IP PHONE			UNIFY	Openstage Desk Phone CP200	18	Unit	
KABEL			Kabel Metal				
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	Į.		
Jaringan Data							
Switch	Access Switch		CISCO	Catalyst C9300-24P	8	Unit	
	Distribution Switch	:	-	-	-	Unit	
			GSPE	Close Rack 42U	1	Unit	
Rack Server		:	GSPE	Wallmount Rack 15U	7	Unit	
			Commscope	F/UTP Cat 6a			
Kabel			Belden	FO			
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NO	DESKRIPSI			GEDUNG	PARKIR				KETERANGAN
	FIRE ALARM							•	
	Smoke/Heat Detector	UNIT Total							
	Official Detector	Unit Tipe 1	:	Notifier	Photoelectric Smoke Detector Addressable	80	TITIK		
		Unit Tipe 2		Notifier	Photoelectric Smoke Detector Non Addressable	17	TITIK		
		Unit Tipe 3		Notifier	Rate of Rise Temperatur Detector	438	TITIK		
	Type & Merk Bell		:	Notifier		14	UNIT		
	Panel Utama Alarm		:	Notifier		1	UNIT		
		Tipe 1 Detektor Non Addressable		Kabel Metal	NYA				
		Tipe 2 Detektor Addressable	:	Datwyler	STP AWG 18				
	rabei	Tipe 3 Kabel Power		Nexans	FRC				
		Tipe 4 Kabel Data	:	Betaflam	FRC AWG 18				
	ССТУ								
	CCTV	Bullet Camera		Sony	SNC-EB630	32	TITIK		
	CCTV	Dome Camera		Sony	SNC-XM631	3			
		PTZ Camera	1.	Sony	SNC-WR630	1	TITIK		
	WADE!	5451	니			-			
	KABEL			Commscope	F/UTP Cat 6a				
	FIDS	T	,		1	П			
	FIDO	FIDS		Inalix					
	FIDS	Monitor	\mathbb{H}	10	CMEKE		11-4		
	KABEL	65	5 :	LG Commscope	SM5KE F/UTP Cat 6a	2	Unit		
	IVADEL			Commiscope	i-/UTF Cat 0d				
	Building Automatic System					_			
	BAS			Honeywell		146	POINT		

Ю	DESKRIPSI			GEDUNG	PARKIR						KETERANGAN
	PLUMBING									<u> </u>	•
	EQUIPMENT UTAMA			MERK	TYPE	JUMLAH	KAPASITAS	SATUAN	DAYA	SATUAN	KETERANGAN
		АВ	:	ATP Toro	PPR PN10						
		AK	:	Vinilon	UPVC type AW						
	ABK AH RISER AE R. POMPA	ABK	:	Vinilon	UPVC tipe AW						
		АН	:	Fast Flow	UPVC						
		RISER AB	:	ATP Toro	PPR PN 10						
		R. POMPA AB		Kitz	JIS 10K						
	VALVE	PRV									Tidak ada PRV
	PRV										Tidak ada PRV

EQUIPMENT UTAMA			MERK	TYPE	JUMLAH	KAPASITAS (GPM)	DAYA (KW)	KETERANGAN
Springkler		:	Tyco	Pendant (68°C)	-			
				Upright (68°C)	2.163			
BOX HIDRANT			Citi Fire	Indoor Hydrant Box	14			
PIPA	FF RISER		SPINDO	Black Steel Sch 40 ASTM A53 Grade A				
	FF SETELAH PRV		SPINDO	Black Steel Sch 40 ASTM A53 Grade A				
	R. POMPA		Kitz	Gate Valve 20K				
VALVE	INSTALASI		Kitz	Gate Valve 16K				
Automatic Air Release Valve			Yoshitake	Cast Iron Automatic Air Vent	6		Unit	
BCV			Vitaulic	Series 751 Firelock	13		Unit	
PRV			Socia	CL101	2		Unit	
	•		MERK	TYPE	JUMLAH			

NO	D DESKRIPSI			GEDUNG	PARKIR							KETERAN	GAN
				Citifire	3,8kg Dry Chemical	145							_
	Fire Extingusher			Citifire	5kg Cleant Agent	8							
			:	Citifire	25kg Clean Agent	3							
7	7 VENTILATION & AIR CONDITION			MERK	TYPE	JUMLAH	KAPASITAS	SATUAN	DAYA	SATUAN	KE	TERANGAN	
	AC	Type 1	:	Daikin	Split Duct	2	100.000,00	Btuh	11,4	KW			
		Type 2		Daikin	Wall mounted	8	18.000	Btuh	1,5	KW			
		Type 3		Daikin	Wall mounted	2	9.000	Btuh	0,78	KW			
	Exshaust Fan	Toilet Type SB.1	:	System Air	Cabinet In Line	1	1000	CFM	0,483	KW			
	LXSHaust I all	Toilet Type 1.1	:	System Air	Cabinet In Line	1	1000	CFM	0,483	KW			
		Toilet Type 2.1		System Air	Cabinet In Line	1	1000	CFM	0,483	KW			
		Toilet Type 3.1		System Air	Cabinet In Line	1	1000	CFM	0,483	KW			
8	ELEVATOR & ESCALATOR			MERK	TYPE	JUMLAH	KAPASITAS (KG)	KAPASITAS (PERSON)	KECEPATAN (MPM)	DAYA (KW)	KE	TERANGAN	
	Passanger Elevator		:	Thyssenkrupp	Machine Roomless	2	-	14	60	15	Bila lebih dari 1	type rinci masii	ng-masing
	Service Elevator			Thyssenkrupp	Machine Roomless	2	2000	-	60	21			